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LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interests of Lake Carriers, and improve the character of the service rendered to the public.

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CHICAGO RIVER—QUALIFIED APPROVAL BY THE FORMER SECRETARY OF WAR—THE INTRODUCTION OF A CURRENT IN THE RIVER NOT PERMISSIBLE.

The following is a copy of the original order issued by the Secretary of War under date of November 16, 1897, with respect to certain changes in the Chicago river then projected. This document is referred to in the preamble of the order issued May 8, 1899.

It has been generally understood that Secretary of War Alger granted at that time an unqualified permit for the completion of the work, opening the canal, etc., but from a perusal of the order it will be seen that such was not the case. Furthermore, the order should now be defunct, null and void on account of the lapse of time since November 16, 1897.

Whereas, by Section 3 of an act of Congress, approved July 13th, 1892, entitled "An act making appropriations for the construction, repair and preservation of certain public works on rivers and harbors, and for other purposes," it is provided that, without the permission of the Secretary of War, it shall not be lawful to build any wharf, pier, dolphin, boom, dam, weir, breakwater, bulkhead, jetty or structure of any kind outside established harbor lines, or where no harbor lines are or may be established, in any port, roadstead, haven, harbor, navigable river, or other waters of the United States, in such manner as shall obstruct or impair navigation, commerce, or anchorage of said waters; or to excavate or fill, or in any manner to alter or modify the course, location, condition, or capacity of any port, roadstead, haven, harbor, harbor of refuge, or inclosure within the limits of any breakwater, or of the channel of any navigable water of the United States, unless approved and authorized by the Secretary of War.

And whereas, the Sanitary District of Chicago has submitted to the Secretary of War for his approval the attached plans for the widening of the Chicago river between Quincy and Harrison streets of said city by the construction of bypasses and docks;

Now therefore, this is to certify that the Secretary of War hereby approves and authorizes the work shown on said plans upon the following conditions:

1. That while the general plan is approved, the Sanitary District of Chicago must furnish plans in triplicate on an enlarged scale showing each proposed new bridge, each bypass, and each new dock or wharf proposed to be built, in order that the Secretary of War may act intelligently in each case.

2. That this authority shall not be interpreted as approval of the plans of the Sanitary District of Chicago to introduce a current into Chicago river. This latter proposition must be hereafter submitted for consideration.

3. That it will not cover obstructions to navigation, by reason of this work while in progress, or when completed.

4. That the United States shall not be put to expense by reason of this work.

5. That this authority will expire by limitation in two years from date unless extended.

Witness my hand this sixteenth day of November, 1897.

R. A. ALGER, Secretary of War.

CABLING WITHOUT WIRES.

Of the future of wireless telegraphy, Nikola Tesla says in the June Century:

Stationary waves in the earth mean something more than mere telegraphy without wires to any distance. They will enable us to attain many important specific results impossible otherwise. For instance, by their use we may produce at will, from a sending station an electrical effect in any particular region of the globe; we may determine the relative position or course of a moving object, such as a vessel at sea, the distance traversed by the same, or its speed; or we may send over the earth a wave of electricity traveling at any rate we desire, from the pace of a turtle up to lightning speed.

With these developments we have every reason to anticipate that in time not very distant most telegraphic messages across the ocean will be transmitted without cables. For short distances we need a "wireless" telephone, which requires no expert operators. The greater the spaces to be bridged, the more rational becomes communication without wires. The cable is not only an easily damaged and costly instrument, but it limits us in the speed of transmission by reason of a certain electrical property inseperable from its construction. A properly designed plant for affecting communication without wires ought to have many times the working capacity of a cable, while it will involve incomparably less expense. Not a long time will pass, I believe, before communication by cable will become obsolete, for not only will signaling by this new method be quicker and cheaper, but also much safer. By using some new means for isolating the messages which I have contrived, an almost perfect privacy can be secured.

NOTICE TO MARINERS.

In accordance with Notice to Mariners issued before the opening of navigation, the following-named buoys were placed on May 18, 1900, off Round Island, St. Mary's River, Michigan:

(1) Sixteen Foot Shoal Buoy No. 5½. A 25 foot black spar in 20 feet of water off the east edge of a sixteen foot shoal, 4,000 feet S. ⅛ W. from Round Island Light-House.

(2) Nine Foot Shoal Buoy No. 2½. A 25 foot red spar in 20 feet of water off the west edge of a nine foot shoal, 2,700 feet east from Round Island Light-House.

By order of the Light-House Board. J. C. WILSON,
Inspector 11th L. H. Dist. Commander, U. S. N.

THE great steel floating dock now building at Sparrow's Point, Md., for the use of the Navy at New Orleans, will be completed in November, but on account of bad weather prevailing at that season it will not be towed down the coast until next spring. As the responsibility for the dock rests with the contractors until it is delivered at New Orleans, they have increased the freeboard of the structure without expense to the Government, to insure greater seaworthiness for the ocean voyage. The lifting power of this dock has been increased to 17,000 tons, which makes it 3,000 tons greater than that of any other floating dock in the world.

BARGAIN SALES.

It is stated that the Navy Department is considering the advisability of selling all the steam yachts, tugboats and small vessels purchased as auxiliaries just after the destruction of the Maine two years ago. The larger vessels which are useful as colliers and transports will be retained, as well as a few small vessels which are actively engaged in surveys and police duty in Cuban and Central American waters. There are about twenty yachts, and as many tugs, that are laid up at navy yards and deteriorating for want of repairs and proper care. One fine yacht, it is said, has her decks warped by the sun until they must be renewed. Her engines and boilers are badly rusted, and many new parts will have to be substituted. This is due to the lack of money to enable Navy yard officials to give the vessel constant attention. It is proposed now to have an appraisal made of all the auxiliaries that are not likely to be useful for naval purposes and offer them for sale. The Government will be satisfied if the appraised valuation can be secured, in view of the fact that it is estimated it would cost nearly $500,000 a year to keep the vessels in proper condition, besides there is now no service for them to perform.

PRESENTATION TO MR. S. J. P. THEARLE.

Ship and engine builders, also many owners and underwriters on the lakes, will no doubt be pleased to learn of the well earned business advancement of Mr. Thearle. It will be remembered that a few years ago Messrs. Cornish and Thearle, representing Lloyd's Register, London, made a somewhat extended business tour of the lakes and became numerously acquainted. Shortly after their return to England, Mr. Thearle was appointed principal surveyor of Lloyd's Register of British and Foreign Shipping for the Tyne district. On the 4th inst. he was the recipient of a presentation from the local surveyors and officials at the Newcastle office, nn the occasion of his promotion to an important position on the consultative staff at the head offices at London, and his colleagues availed themselves of the opportunity of presenting him with a small token of their esteem and regard. The presentation comprised the photos of all the members of the Newcastle staff. A diamond and ruby bracelet was presented to Mrs. Thearle.

Mr. McNeil and Mr. Cooke, senior surveyors, made the presentation, and both gentlemen spoke of the able manner in which Mr. Thearle had discharged his duties, and alluded in graceful terms to his geniality and the willingness he had invaribly shown to render assistance to those who sought his services. While they exceedingly regretted his departure from Newcastle, yet they could not but most heartily congratulate him on his well-earned promotion to London, and trusted he might be spared for many years to take an active part in the administration of Lloyd's Register. Other members of the staff also spoke, after which Mr. Thearle replied, thanking his colleagues for their kind gifts, which he assured them he would always cherish, as they would remind him of the happy time spent in their midst.

"STANDARD Boats of the United States Navy" compiled under the direction of Chief Constructor Philip Hichborn and recently issued from the Bureau of Construction and Repair, Navy Department, Washington, D. C. Among the illustrations is one (Plate 153) which occupies an entire page (12x14 inches) showing in every detail the Standard Automatic Releasing Hook as attached to a life-boat. The publication of this improved and meritorious device in a Government work of this magnitude demonstrates the interest taken in it by the Navy Department, and is a worthy recognition of the value of the invention and a great compliment to the owners of the device, for it must be considered that an article of this description in order to meet the approval of the Department must be practicable and undergo a severe test.

DULUTH—SUPERIOR.

Special Correspondence to The Marine Record.

Ore shipments last week from Ashland were 92,652 tons, for the season thus far a total of 401,213 tons.

It cost about $4,000 to repair the steamer Northern King, which was in collision with the steamer Black Rock. Repairs were made here.

The new Bessemer steamer Charles R. Van Hise will be launched at the West Superior shipyard of the American Ship Building Co. June 16.

Saturday, June 16, is the day set for the launching of the steamer Van Hise at the ship yards in West Superior. The Van Hise is 260 feet long. She has a tonnage of 3,673 tons, and is the first vessel built at these yards designed to pass through the Welland canal.

The shipments from the iron range docks at Two Harbors for May will be in the neighborhood of 600,000 gross tons. This is an enormous business as compared with previous first months of the season of navigation. The Two Harbors docks will ship about 5,000,000 tons this year.

The ore movement from the head of the lakes at present is only about 60 per cent. of what will have to be maintained from June 1 to the close of navigation to move the 11,000,000 tons which Minnesota will ship this year. More tonnage by 30 to 40 per cent. will be going for ore after the beginning of May than at present.

The new dry dock at West Superior is now completed. The dock is designed for the largest single vessel on the lakes, and allows ample room for a decade of expansion: Extreme length 620 feet; breadth at bottom 60 feet; depth over sills 18 feet. This immense excavation holds 10,000,000 gallons of water, and it can be pumped out by the two 30-inch cylindrical pumps at the rate of 50,000 gallons a minute, or a trifle over three hours.

The Collingwood Steel Ship Building & Dry Dock Co., of Collingwood, Ont., is now organized with a paid up capital of $200,000. The following officers: J. J. Long, president; Capt. Alex. McDougall, vice president; Thomas Long, Secy.-Treas.; Capt. Campbell and Charles Cameron, directors. This is the company that took over the Collingwood dry docks and which secured shipbuilding machinery from the works at Everett, Wash.

Lumber shippers have at last forced down the freight rates to $2.50 and it is not probable that they will be any higer than this for some time to come. Davis & Comstock of Marinette, have made a charter to ship to Buffalo at $2.50 and boats seem to be plentiful at that figure for any of the Lake Erie ports. When the rates opened at $3 many thought that this would be the lowest figure of the season but the light demand for lumber carriers and the united determination to force down the rate has resulted in the $2.50 figure being reached.

The first stranding casualty of the season at the head of the lakes took place last Friday morning when the steamer America, Capt. Gibson, went ashore about a mile southeast of the Superior entry. The America is over 2,000 tons register, owned by Maytham and others. She was bound up with coal for Ohio dock No. 2 at Superior. The smoke and haze was very thick on the lake all day Thursday and the vessel got slightly off her course. Captain Gibson was feeling his way into land very cautiously, so that when his ship took the bottom, she did not go on very hard.

In the case of the steamer Peerless against the tugs Buffalo and Industry of the Great Lakes Towing Co. to recover damages on account of the accident which caused the sinking of the Peerless here last year. Judge Lochren decided in favor of the tugs. After the accident the Peerless libeled the tugs, claiming damages to the amount of $21,000. The case was tried before Judge Lochren at Minneapolis last week and his decision releases the tugs and incidentally exonerates the tug captains from all blame. This decision practically reverses Inspectors Monahan and Chalk and Supervising Inspector Sloan, who placed the blame on the tug captains and suspended them. The Peerless was represented by C. E. Kremer, Esq., of Chicago, and the tug company by Searle & Spencer of this city. The tug Mystic of the Stevens Towing Co. is likewise released from all blame. The court holds that the Peerless was at fault in acting independent of the tug Industry, and backing at a critical moment, without receiving a signal to do so. John H. Norton Esq., represented the tug Mystic.

IT is stated that the Illinois, Indiana & Iowa railroad will invade the northwest territory by means of a car ferry line between Milwaukee and St. Joseph. Freight will be laid down in Milwaukee to be forwarded through the rail connections to northwestern points.

DETROIT.

Special Correspondence to The Marine Record.

The car-ferry and ice crusher St. Ignace has been docked for a thorough overhauling and repairs.

It is announced from Bay City and from Capt. Davidson's shipyard that there is no truth in the rumor that his yard has contracted to build five or any tugs for the Maytham line.

The naval reserve drill ship Yantic will leave the wharf and go to an anchor in the river. That is where she ought to be in the summer.

The Beecher estate wanted to charge the mail boat Florence B. $15 per month as dock rent. She now lays at the foot of Second street.

On Saturday, June 16, according to the present plans of the Detroit Ship Building Co., the first of the Eddy freighters will be launched, and a month later her sister ship will follow.

The revenue cutter Fessenden has been ordered here on June 8, 9 and 10, to take part in the public demonstration on those days in honor of the visit to this city of Admiral Dewey.

Two automatic stokers have been taken out of the steamer Frank E. Kirby at this port. According to the report of the officers of the Kirby the success of the stokers was not great, and the old fashioned fireman is to be preferred. The automatic stokers did not furnish steam for fast running, though at first the prospects were of the best.

Fog has prevailed this week on Lake Huron, also on Lake Michigan. It would be a guide if the Weather Bureau could point out in advance the probable location, form, density and prevelence of fogs on the several lakes, these data to be derived from observations of the previous seasons, etc. It is not wise to prophesy when we don't know, nor is it required to be told what we do know, but it's a good thing to know probabilities.

Capt. Horace Baker, of Detroit, owner of the small steamer T. W. Snook, has added the large tug, Champion, to his wrecking outfit. The Champion is now in dry-dock here for a rebuild that will cost $7,000. She is receiving a new boiler, and a derrick spar for handling pumps. She will be stationed in the Straits of Mackinac, to be ready for wrecks in Lakes Superior, Michigan or Huron, and the Snook will stay in Detroit.

Percy E. Bourke, agent of the Western Transit and the Anchor lines, states that the rumors about the Anchor line building a fleet of six new ships has been so persistently circulating about the lakes that it is time to announce the falsity of the rumor. "The Anchor line," said he, "does not contemplate building any new boats at the present time. In regard to the later rumor that the Anchor line and the Lehigh Valley would consolidate their fleets, I have heard nothing one way or the other."

Attorney Frank H. Canfield, representing the owners of the cargo of the Conemaugh, which steamer was sunk in the Detroit river eight years ago, has received a dispatch stating that the United States Supreme Court has refused an application from the attorneys of the steamer New York to divide the loss on the Conemaugh's cargo between the two steamers. If this is correct, this famous case is where it was left by the supreme court several months ago, the blame being divided and the cost of the cargo being placed against the New York.

The steam yacht Pryun, built by the Detroit Boat Works to the order of F. P. Cheesebrough, Bay City, will be launched this week. She is 105 feet over all, 16 feet beam, and her draft will be about 6½ feet. Compound engines with cylinders of 10 and 20 inches and a 14-inch stroke will give the boat a mean speed of 12 miles an hour. Deering water tube boilers will furnish steam at 250 pounds pressure. A complete electric light plant will be installed on the yacht and every part of the craft will be lighted by incandescent lamps and ventilated by electric fans.

It is a current report here this week that Capt. James Davidson's break with the tug trust was a premeditated scheme, and two facts add weight to the belief. Five new tugs for Maytham's independent tug line are contracted for at the Davidson yards at Bay City and Davidson is said to have sold off all his tug trust stock. Many other large trust stockholders are said to be in a position to speedily throw their towing to the independent lines, and the large scale on which Maytham has been buying and contracting for tugs would show that he has secured backing. The trust has done itself great injury by the attempt to force the two-tug rule on large barges at Duluth. Since the arbitrary action of the Duluth office the independent lines have been much better patronized at all lake ports. The new tug contract is denied from Bay City.

On Monday morning the car-ferry, Pere Marquette, ran down the small schooner, Silver Lake, 10 miles off Manitowoc, Wis. A dense fog prevailed, and neither boat was aware of the other's proximity until the collision. The car ferry struck the schooner amidships, the latter hanging by her rigging to the steamer's bow until cut away. Three men climbed into the rigging and boarded the car ferry. Henry Eastman, the cook, was lost. The Silver Lake was owned by Nels Johnson, of Racine. She was loaded with cordwood and sank when cut away. She was valued at $1,500. This will not prevent steamers running wide open in a fog, as they can whistle which side they propose to take when hearing another fellow's fog signal. The Supervising Inspectors of Steamboats might consider the adoption of a steam or electric calliope, so that the exact points of the compass over which a steamer was heading during a fog might be indicated by note. This would tend toward the higher development of a musical ear in lake pilots. It is not compulsory, however, that this notion should be acted upon, as it is merely thrown out as a suggestion.

CHICAGO.

Special Correspondence to the Marine Record.

Grain freights are on the basis of 1¼ cents on corn to Buffalo this week.

J. B. Bates & Co., have purchased the schooner Lotus from Capt. Robert Seator for $4,300.

The steamer Albert Soper was in dock for a new wheel and stern pipe, the schooner Geo. A. Marsh to have a leak stopped.

Capt. Jas. S. Dunham and wife arrived here from an extended tour in Europe, on Friday last. The captain looks hearty and well, and says he has had a very enjoyable trip.

The steamer J. D. Marshall, Capt. J. C. Pereue, arrived Saturday morning with a large load of telegraph poles from Drummonds Island, the deck load was piled up 24 feet above the deck.

A large fleet of lumber schooners are strike-bound in Milwaukee. The owners say they will engage crews here, if so, the lumber shovers swear that they will place the vessels under a penalty.

Mr. Robert Curr, of Cleveland, marine surveyor, who superintended the construction of the recent additions to the Bessemer fleet, is in Chicago. It is reported that he is here regarding some vessels to be built at South Chicago.

There is great rivalry and competition here in the tug business between the independent or Maytham line of tugs and the Great Lakes Towing Co. or syndicate tugs. Lumber hookers are now almost being towed from port to port and the competition is yet only beginning.

Four-track steel bascule bridges exclusively for the use of street cars are proposed by Trustee Smyth of the Sanitary District of Chicago as the best substitutes for the present tunnels under the river. He advocates the construction of these bridges at all points where tunnels are now located.

General Manager Miles E. Barry of the Chicago and Muskegon Trans. Co., gave an excursion out of Muskegon last Sunday, on the steamer State of Michigan, which was patronized by nearly 400 of the towns folk. The weather was delightful and a three hours' ride on Lake Michigan was much enjoyed.

Geo. B. Carpenter & Co. shipchandlers' store was badly damaged by fire Saturday, everything in the two top floors was destroyed, and in the two bottom floors they were damaged by water. The company have removed to the Southwest corner of South Water street and Fifth avenue, opposite their old location.

The Lake Michigan and Lake Superior Trans. Co.'s new offices, warehouse and dock have just been completed. The warehouse is 160 feet long fronting on the dock and 100 feet deep, giving large floor space. The offices are the most handsome suite of steamboat offices in the city. General Manager Charles Spencer says the freight business is fairly good and the passenger business is picking up and will improve as the season advances.

Bids for a new bascule bridge to span the Calumet river at Ninety-fifth street, Chicago, were opened May 15. Five bids were presented, ranging in amounts from $140,000 to $240,000. The lowest bid was from Roehmheld & Gallery, who offered to erect a modern bascule bridge of an approved design for $140,000. Bids for the iron work ranged from $72,000 to $150,000. The Chicago Bridge & Iron Co. made the latter bid; the Milwaukee Bridge & Iron Co. bid $129,600; Lydon & Drews, $112,700; Roehmheld & Gallery; $75,630 and C. L. Strohel on different designs ranging from $72,000 to $86,300. The bids were for bascule bridges and did not include abutments or other work.

An independent fueling dock has been established in the South branch of the river at Sixteenth street. The dock has a frontage on the river of 600 feet and was formerly used by the O. S. Richardson Fueling Co. The dock is operated by the Independent Fueling Co., Capt. George Tebo, manager. Indiana Block Coal will be supplied to the steamers fueling at the new dock. In addition the company will have a derrick with a carrying capacity of 175 tons at the mouth of the river and another scow which will carry 250 tons. A number of Capt. Tebo's old friends and patrons have already shown their appreciation of his untiring efforts in getting another fueling dock established here, by giving the new company their patronage.

Vice-President L. L. Barth, of the Edward Hines Lumber Co., places the blame for the stagnation of the lumber trade at the doors of the unions and contractors. He says: "All our hopes for a good season have gone to smash. The labor strife has hurt the lumbermen as well as the shippers. Last year estimates placed the lumber shipments into Chicago at 750,000,000. If the present state of affairs continues, I believe the shipments for this season will not amount to more than 350,000,000 feet. This partial suspension of business makes the aspect serious for us, as it does for all the lumber men in Chicago." The advance in tow bills made at all the ports around the chain of lakes by the Great Lakes Towing Co. is 8 7-10 per cent. This information comes from one of the largest vessel owners.

BUFFALO.

Special Correspondence to The Marine Record.

Capt. Maytham, of Buffalo, has closed a deal for the Alpena tugs Maxwell A and Arthur D.

During the week the Rochester & Pittsburg has shipped a cargo of 1,200 tons of coke to Duluth, the first on record to go out from here by lake.

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The State commerce convention, to be held at Syracuse on June 6 and 7, will be well attended by influential candidates in favor of enlarging and otherwise improving the Erie canal.

Capt. Timothy Higgins has been appointed master of the tug Erie of the Maytham Towing & Wrecking Co. Capt. O'Connors, who was master of the Erie, will have charge of one of Capt. Maytham's tugs at Ashtabula.

Erie canal boatmen report business so unprofitable that there is no excuse left for continuing in it. Little or no grain is to be had, and the freight rates on west-bound package freight are not enough to pay for return trips.

Charles F. Talman, who has been observer in the local Weather Bureau office for the past three months, has been assigned to duty at the central office at Washington. Weather Forecaster Cuthbertson spoke with great regret of his loss, but nevertheless was pleased at Mr. Talman's promotion. William J. A. Schoppe, of Yankton, S. D., has been assigned to the Buffalo office.

The yacht Uvera, bought by Charles Canfield, the millionaire mine owner of Manistee, Mich., from Clifford Bokaw of New York, arrived here all well. The yacht came through the Erie canal, and after refitting she will go on to Manistee. The Uvera was built by the Herreshoffs and has a speed of 18 miles an hour. The boat has accommodations for 19 people. She is 103 feet in length, 11½ feet beam. She is worth about $30,000.

The Buffalo elevator pool has been reorganized for this season on substantially the terms of last year's pool. Rates will be the same as last year, to wit, one-half cent for elevation and loading, with ten days' storage, and one-fourth cent for each additional ten days or part thereof. The service of the pool last year seems to have been satisfactory to all interested, save the Erie canal and its friends and patrons, who then accused, as they do now, the pool of hostility to that important waterway.

Capt. James Price, of the Fort Niagara life-saving station died at Fort Niagara on Saturday last. He was formerly mate of the Oswego station and was promoted to keeper of the Fort Niagara station one month ago. He died of an abcess. The remains were taken to Daysville for interment. Capt. Price was born at Port Ontario in 1858. He was a sailor by occupation and followed the lakes until seven years ago when he became a member of the Oswego life-saving crew. He leaves a wife and three daughters at Daysville, also a motherand two brothers.

Considerable depression has been produced in shipbuilding business by the fall in the price of building material, which, strange to say, has made prospective builders of boats slow to place contracts, instead of hurrying to get them in before the prices advance again. The belief seems to be that steel plate will drop still lower, and the companies planning to build new boats are holding off until this expected drop takes place. At the time when the contracts were made last fall steel was away up, and the maximum reached was $62 per ton for plates. At present the price is but $35 per ton for the same material, a drop of $27 having taken place, which means something like $75,000 on the cost of an average freighter.

The forecast official of the Weather Bureau states that the month came in with ice on the lake, extending from shore to shore, as far as the eye could reach. It continued until May 8, when clear water was observed for the first time west of the main ice fields. The ice continued obstructive and, to some extent, dangerous to navigation until the 12th, on which date the schooner Howland had a large hole stove in her and sank about 6 miles to the west of this port. From the 12th to the 15th the ice field disappeared very rapidly, large fields passing down the Niagara river, and the high temperature prevailing melting it considerable. The continuation of ice at this end of the lake was due to the late formation of the same, the total lack of high winds, and deficiency of warm rains during April and the early part of May. I find that the disappearance of ice this season was the latest in the history of this station, except that of the season of 1875, when the last ice was visible on May 23. On May 15-16 an ice field about half a mile wide was driven up the lake by east winds. No ice visible May 17.

The officials of the Longshoremen's union are just holding their luff, considering whether to go on the other tack and order out other locals. Secretary Barter says: "The men are a unit against the contract system and will not stand for a compromise of any kind. The men will demand 30 cents an hour for regular work, 35 cents for over time and no work on Sunday. We are not fighting Connors," said he, "but the contract system. It's got to be abolished. There are 2,400 men handling package freight at Buffalo, and 8,000 in all branches of longshoremen's work. The freight handlers are urging that all locals in Buffalo be called out at once in order to bring the matter to an immediate settlement, but the union is trying to gain its point without resorting to such drastic ends. Should the pressure on the line managers fail, the only course left open would be to call out all Buffalo locals, this to be followed, if necessary, by calling out all freight handlers and longshoremen on the lakes, with the possibility of following with firemen, thereby tying up all lake traffic indefinitely. We will not give an inch so far as the freight contracts are concerned. There might be concessions as to the minor details of the proposition, but the contracts must go. We do not desire to injure vesselmen, as the interests of the lake carriers are identical with ours. The freight handling contracts must go; on that point we are immovably of one mind."

CLEVELAND.

Special Correspondence to The Marine Record.

The gas buoy on the southeast shoal in Pelee Passage has been placed in position and is burning again.

Capt. E. Day, ship's-husband for the Pittsburg Steamship Co. is on a business visit to Duluth this week.

Cloudy weather on Monday prevented sighting old Soleil. The eclipse is supposed to have got in its work all right.

Decoration day was generally observed in vessel circles and only immediate or pressing business was attended to.

Capt. F. A. Bailey will sail the steamer Lafayette of the Pittsburg Steamship Co.'s fleet, launched at Lorain Thursday.

Mr. J. E. Upson, of the Upson-Walton Co., has been elected president of the Wilson Transit Co. Mr. Upson was interested with Capt. Wilson in nearly all his vessel investments.

Mr. Martin Mullen left this week on a tour of the old country. He will visit all the principal points in England, Ireland, Scotland, Germany and France. He will be gone about three months.

The small passenger steamer Skater is on the route between Ashtabula and Cleveland, calling at Fairport, on Tuesdays and Fridays. On Wednesdays she will ply between Ashtabula and Conneaut.

It cost the steamer Yale $4,000 in dry-dock and repair bills as a result of her experience in the ice at the lower end of Lake Erie in the spring. Fifteen frames and six shell plates had to be replaced.

Several more groundings on Ashtabula bar occurred this week; the Centurion and Andrew Carnegie were assisted by tugs. This port has not an inch too much water to boast of, but, luckily, there are no recent groundings to its discredit.

William Garvin, fireman on the steamer W. D. Rees, fell overboard about eight miles west of Ashtabula last Wednesday night. The steamer was stopped immediately, but nothing was seen of the drowning man. He lived in Cleveland.

The Cleveland and Toledo line, that will run the moonlight excursions this year, announces that the first one will be on June 10, when the Meistersingers will give a concert on board the City of the Straits, on which the excursion is to be run.

The fire in the Calumet and Hecla copper ore mines near Houghton, Mich., is now under control. The property is valued at $75,000,000. It has shafts over a mile in depth and employed 5,000 men. It is said to be the richest copper mine in the world.

The steamer H. D. Coffinberry, Capt. Wm. Ferguson, owned by E. M. Carleton, Cleveland, and her consort, the Checotah, went ashore in a fog on Thunder Bay Island last Monday. They were released badly damaged. The steamer is 26 and the barge 30 years old.

Capt. John W. Moore intended converting his yacht into a tug boat, but, on re-consideration, will take more enjoyment out of her. He took a large party of friends to Black river on Wednesday. That's about right, too, Capt. Moore, take the pleasure while you can.

Bartlett & Tinker, steamship agents, wharfingers and forwarders, River street, announce the opening of the season for the Lake Erie Transportation Co. as June 1. At the same time they speak of several new summer resorts in Canada that are to be opened this season.

Capt. Frank C. Rae will sail the steamer Princeton, the second of the big steamers building for the Pittsburg Steamship Co. at Lorain. The Princeton will not come out until late in the season. Capt. Rae sailed for A. B. Wolvin for a number of years and is one of the youngest masters on the lakes in command of the largest class of steamers.

Capt. Collier, general manager of the Great Lakes Towing Co., has returned from Duluth and denies that Capt. James Davidson is offended at the recent action of the Duluth tug men, or that his patronage will hereafter be given to the Maytham Towing and Wrecking Co. Capt. Collier seemed pleased enough and said that Capt. Davidson was all right.

The labor flurry is still on between stevedore and masterporter, Martin J. Conners, and the Longshoremen's Union. The difference exists in the matter of handling grain and lumber. Conners was formerly business agent of the Grain Shovelers' and Freight Handler's union, which is affiliated with the Knights of Labor, and he is still supposed to be employing members of that order.

The funeral services over the remains of the late Jonathan Ford Card, who died at the Forest City House, after a brief illness, last Friday morning, took place at St. Paul's church. The honorary pallbearers were Messrs. Luther Allen, George Warmington, M. A. Bradley, H. E. Bourne, R. R. Rhodes, and C. C. Bolton. The active pallbearers were the head waiter and three assistants, all colored, from the Forest City House, where Mr. Card had made his home for some time.

The House Committee on Rivers and Harbors will not take a trip up the lakes in the middle of June, as was intended a month ago. Several members have found it impossible to go at that time, and the tour of inspection of the principal lake channels and harbors will not be made before the middle or end of July. It was the intention of the committee to start from Buffalo June 17 and proceed thence to Cleveland, Detroit, Mackinac, the "Soo" and other points. For the reason named, however, the trip has been postponed.

The master of the large Davidson schooner Matanzas appears not to have got over his treatment at Duluth, where, because he wouldn't pay for two tugs he was left to lay outside the port. When he reached here on Tuesday he had no use for the syndicate tugs and waited for the independent boats to tow him in. The matter was thought to be settled, as Capt. Davidson assured President Newman that the Great Lakes Towing Co. would do all his work. Capt. Davidson must have failed to notify the master of the Matanzas after the Duluth trouble.

The British steamer Theano, from Newcastle, Eng., loaded part cargo of railroad iron at Lorain this week. The Theano made the trip across the Atlantic in 16 days, in command of Capt. Stonehouse, but will be piloted by Capt. Chestnut. The steamer is 235 feet long, 36 feet beam and draws 18 feet of water and carries a crew of 22. She was built at Rotterdam in 1890, and since then has been engaged in the Newcastle coal trade. The Theano was purchased by Mr. Clergue, and will be used in carrying ore from New Ontario mines to Sault Ste. Marie.

Hoyt, Dustin & Kelley, attorneys for the Great Lakes Towing Co., take exceptions to the report that was sent out from Duluth, to the effect that the blame of the collision in which the boats of the Lake Michigan & Lake Superior Transit Co. were mixed up was attached to the tugs Buffalo and Industry. They said that all three tugs were discharged from the libel, the blame being attached to the steamer Peerless because she continued to back while her tug told her, by signal, to stop backing. The presiding judge gave it as his opinion that it was the continued backing of the Peerless that caused the mischief.

Western grain shippers, especially those at Chicago and Duluth, are viewing with no small amount of satisfaction the development in the lake trade that is making it possible to get around Buffalo with grain shipments. The Daily Commercial Record, Duluth, says: Buffalo is no longer the whole thing. The export grain shipper has the choice of three or four excellent routes to the seaboard, and, judging from the cargo destinations this year, they must offer some advantages over the Buffalo-New York route. The Pennsylvania line through Fairport has been doing a big business. The Canada Atlantic route through Depot Harbor and Montreal is an especial favorite, and are handling all the business they care to take. Montreal is just beginning to open up, and, with the completion of the boats now under construction, will be a big factor. The other Canadian routes through Collingwood, Sarnia, Owen Sound and Midland are more than holding their own, while all of the American Lake Erie ports, Erie, Sandusky and Cleveland, show a comparative increase in receipts.

MARINE DIRECTORY FOR 1900.

Beeson's Marine Directory for 1900, the 13th annual edition of that work, published by Harvey C. Beeson of Chicago has just come from press and is being distributed to subscribers. The work, is as usual, one of about 260 pages, bound in cloth, gold embossed cover. The cover design this year is rather striking, being engraved specially for the work. The illustrations, to the number of two score, are well chosen and cover a wide range of subjects. While for the most part they are credited to other publications, still there are several among them that are new. The most striking is perhaps that of the three ore docks at Two Harbors, all grouped on one plate.

The steam and sail vessel lists are corrected up to the latest date and include all the ships now building, for which names have been given out. The large number of vessels which changed hands during 1899, make these lists of more than usual interest and value. The list of lumber carriers in the work has been doubled in size and corrected throughout. The list of engines and boilers, with their dimensions, etc., has been largely added to. The miscellaneous contents of the work in the way of readable articles is better than heretofore, and the work shows an increased advertising and subscription patronage.

Whaleback barge No. 115, which went ashore on Pie Island, Lake Superior, last fall, is a total wreck.

Tugs of the trust and independent lines at Chicago now run down the lake even beyond Milwaukee in quest of tows.

A meeting was held on Friday at Milwaukee for the purpose of organizing to secure an outer harbor for the city. Mayor Rose appointed a committee of 20 to consult with the Engineer Department.

The grain carrier Ottawa, the biggest vessel ever built on Lake Ontario, was launched at the Bertram yard at Toronto Wednesday afternoon. The Ottawa belongs to the Booth Transport line. She is 257 feet over all, 43 feet beam, 25 feet 6 inches deep, and will carry over 70,000 bushels of wheat on the canal draft of 14 feet. On the upper lake draft she will carry over 105,000 bushels of wheat.

MODERN TORPEDO BOAT CONSTRUCTION.

The most interesting recent contribution to the literature on torpedo boats is the answer to Lieut. A. P. Niblack, U. S. N., by Wm. A. Fairburn, naval architect and engineer and President Chas. R. Hanscom's assistant in the Eastern Ship Building Co., of New London, read before the American Society of Naval Architects and Marine Engineers.

After voicing his disappointment in Lieutenant Niblack's arguments, Mr. Fairburn says, in part:

"Although it is a fact that almost any shipyard today, without traditions or previous experience, seems willing to take the contracts for high-speed torpedo boats, and destroyers, yet upon strict scrutiny we find that such firms almost invariably have in their possession plans of successful similar boats, and instead of branching out, taking great risks, and thereby courting disaster, they seem perfectly contented to follow in the beaten tracks and in the footsteps of some successful torpedo boat builder. The new successful torpedo boat building firms—whether they be new firms just springing up, without any building experience, or old established firms now branching out into light construction—will be those who are now following the plans of such builders as Thorneycroft, Yarrow and Normand, and the few firms which in some respects are apparently original, breaking away from old traditions and making innovations, will probably discover by bitter experience that a speed of 28 or 30 knots, although lightly spoken of today, is nevertheless a difficult proposition, and cannot be attained without gradual steady progression. If a firm is not willing to profit by another's experience, it must of necessity go over very nearly the same ground that other firms have traversed, and meet evils and discouragements of a similar nature to those they have encountered and overcome in the past.

"I think the ship builders who contracted to build torpedo boats and destroyers from the United State Navy Department's designs fifteen months ago exhibited a great amount of courage. Such firms are bound down and limited on every side; they take a great deal of responsibility, and the most optimistic cannot feel confident of satisfactory results and probable success. The contractors, most of whom, however, are inexperienced firms, guarantee results without voice in the matter, and therefore exercise a blind, unreasonable faith in the department's ability to design successful torpedo craft. Other governments, with great experience in torpedo boat construction, and with navies containing hundreds of these little craft, have not as yet considered it advisable to prepare their own designs. I think, therefore, that it is poor policy for the United States Navy Department to attempt designing before they have had experience with various types of these vessels. There are many types of successful torpedo boats, but when a compromise is attempted and the so-called good features of all are embodied into one design the results are usually disastrous.

"Lieutenant Niblack lays great stress upon the fact that high speed is not necessary or even desirable in torpedo boat construction. Naval authorities, the world over, will differ with him in this broad assertion. Speed is the torpedo vessel's only protection. On a dark, thick night a torpedo boat can steam within striking distance of a war vessel without being seen or heard on board the latter vessel. This has often been done, and, under certain atmospheric conditions, the searchlight is valueless, noise is deadened, and picket boats and torpedo nets are the only efficient parts of a war vessel's torpedo defense. On a clear night sound travels, and noise of any great intensity can be heard for miles at sea. Under such atmospheric conditions it is probable that the racket and dull thud of a torpedo boat's machinery could be heard for some little distance, flames shooting from the stacks would soon be discerned, and the searchlight, working under most favorable conditions, would probably locate without difficulty the on-coming torpedo boat.

"It appears then, that on a clear night, when the conditions are most unfavorable for a torpedo boat attack, noise and flame should be eliminated as much as possible, if the torpedo boat attack is to prove successful. The blowers run at high speed in order to obtain great air pressure in the fire rooms, are the cause of almost all the noise on board a high-speed vessel, therefore a torpedo boat should crawl up on the enemy under natural draught or with blowers running very slowly, the fires should not be too thick on the grates, and under natural draft or a slight air pressure, with thin, carefully laid fires, no flame would shoot from the stacks to herald the vessel's approach. I do not think that flames pouring from the stacks need be considered in torpedo boat design, for my experience is that thick, heavy fires and great air pressure are responsible for this disagreeable feature so detrimental to torpedo boat attack. The amount of smoke pouring from the boat's stacks should be reduced to a minimum, but the quality of coal used is responsible primarily for the volume of smoke discharged from the stacks, although the air pressure has a great deal to do with it.

"Under the most unfavorable conditions for torpedo boat attack, a torpedo boat will probably steam a good distance within a war vessels zone of secondary battery fire before she is discovered. Speed under natural draft, or easy steaming conditions, is therefore of great importance in a torpedo boat, for the period that she is running the risk of being destroyed depends on the vessel's easy steaming speed for a good part of the time, and when once discovered the sooner the vessel's speed can be increased to the maximum, and the faster the vessel can steam, the less time she will be within range of the enemy's guns. The speedier the attacking boat, the sooner, therefore she can get within striking distance of her prey, and the quicker she can steam beyond range of the enemy's guns. A 22-knot torpedo boat cannot steam at a speed of 20 knots or more under natural draft, as Lieutenant Niblack would seem to imply, but to attain this speed she must run under forced draft and speed the blowers, which means to make as much noise as the 30-knot boat would make at 27 or 28 knots speed. If the slower torpedo boat steams up to her adversary under natural draft, it will take about as long to pass from a natural-draft speed to her full speed of, say 22 knots as it will take a 30-knot boat to increase from 20 to 22 knots up. A torpedo boat will be in range of the enemy's guns for a certain period of time that depends wholly on the vessel's speed, providing she is not disabled. Therefore the protection of a 30-knot boat compared with that of a 20-knot boat is in the ratio of three to two.

"The arrangement of torpedo tubes on American boats is, in my opinion, crude and most inefficient. The stern tube, to which the Bureau of Ordnance fondly clings, cannot be fired when the vessel is under way, and it is therefore practically valueless. The midship tubes are undoubtedly desirable and necessary, but when using these guns the torpedo-boat presents generally a full broadside as a target for the enemy's rapid-fire battery.

"The torpedo boat must of necessity be a refined machine. Mathematics and science must take the place of the two-foot rule and the 'about-so-much' method of proportioning scantlings and details. High grade materials must be used so as to keep the factor of safety reasonably high, with minimum weight. A light, refined machine, however, does not mean a weak, flimsy production. Weight does not necessarily mean strength. Far from it, for there are torpedo-boats afloat that in actual service, if well cared for, will stand as much wear and tear as the average heavily built cruiser. Some of the most rugged, durable, best, and easiest running machinery that I have ever seen has been modern high-speed torpedo-boat machinery."

VISIBLE SUPPLY OF GRAIN.

As compiled for THE MARINE RECORD, by George F. Stone, Secretary Chicago Board of Trade.

CITIES WHERE STORED.	WHEAT. Bushels.	CORN. Bushels.	OATS. Bushels.	RYE. Bushels.	BARLEY Bushels.
Buffalo	1,440,000	572,000	895,000	183,000	265,000
Chicago	10,012,000	4,176,000	1,147,000	415,000	.....
Detroit	188,000	151,000	13,000	5,000	1,000
Duluth	11,682,000	1,187,000	462,000	27,000	31,000
Fort William, Ont.	2,325,000	.....	.....	.....	.....
Milwaukee	220,000	2,000	2,000	1,000	1,000
Port Arthur, Ont.	175,000	.....	.....	.....	.....
Toledo	193,000	463,000	188,000	1,000	.....
Toronto	28,000	.....	10,000	.....	22,000
On Canals	432,000	.....	129,000	95,000	125,000
On Lakes	1,112,000	528,000	374,000	25,000	116,000
On Miss. River	.....	36,000	48,000	.....	.....
Grand Total	44,755,000	12,687,000	6,786,000	1,067,000	944,000
Corresponding Date, 1899	24,192,000	13,730,000	7,814,000	689,000	1,455,000
Increase	.....	.....	400,000	.....	115,000
Decrease	1,508,000	2,540,000	.....	51,000	.....

While the stock of grain at lake ports only is here given, the total shows the figures for the entire country except the Pacific Slope.

CARL HERING, of Philadelphia, has been elected president of the American Institute of Electrical Engineers, which held its seventeenth general meeting in Philadelphia on May 16-18. There was a good attendance of active and associate members, representing the principal cities of the country.

WHEN SHIPMASTERS ARE NOT MASTERS.

It appears that every marine paper and some that are not marine, are at variance with the action taken by the Board of Supervising Inspectors of Steamboats.

The Waterways Journal, St. Louis, Mo., in a scathing arraignment of the chief of the service, known as the Supervising Inspector-General of the Steamboat Inspection Service, blames him in part for the decline of western river steamboating through permitting damphool notions to be embodied in legislative rules.

In an editorial on "Some Reasons for the Decline of Steamboating," the Waterways Journal in its latest issue says, in part:

"Chief of these causes is that of 'knocks' received from the hands of an unworthy individual who predominates at Washington, and who is always on the alert to issue obnoxious rulings against steamboat interests, and who knows no more about a Western river steamboat or its needs than 'a hog knows about Sunday.' Whether this is done for his own individual gain via. the railroad lobby or through ignorance, is a question, but nevertheless, the orders are issued 'fast and furious.' The Supervising Inspectors who represent the second district are powerless and mere figureheads to the gentleman in charge at Washington. When he nods his head their heads nod the same way. They must dance to the music from constant fear of losing their situations. Whatever Mr. Dumont wants is acceded to usually without a dissenting vote. * * * It is not utterly impossible to secure his removal. President McKinley is a Western man, and anything for the improvement and benefit of the Great West will find favor with him. Mr. Dumont is an Easterner. But Mr. McKinley is powerless uuless he is moved and advised by Congressmen, who must be moved by the people in general, and these can be reached by steamboat owners through petitions. Think of it, trying to regulate the size of tows! The next thing will be to regulate the size of boats to be built in the future! Such absurdity! Get up petitions and put them on every packet for passengers to sign, and interest the Congressmen."

Directly opposing the action taken at the last annual meeting, or perhaps social pow wow would better describe the getting together of the Board of Supervising Inspectors at Washington last January. A successful steamboat master writes to the Nautical Gazette, New York, of the 24 inst. the following sensible and pertinent views.

"The communication in a recent issue of The Nautical Gazette, signed 'Captain,' on 'Hard Rules for Sailing Men Made Easy,' was read with interest, and no doubt the sentiments expressed therein met with the approval of some. For myself I see no difficulty in a sailing vessel captain commanding a steamer, stepping as I did from a sailing ship to the command of an ocean steamer, and keeping in command without the least accident for twenty years, always leaving on time and arriving on time. As for the executive ability, in case of any difficulty the captain is more in danger of being bounced than either the steward or the engineer. As for the New Law, compelling a sailing captain to go as 1st officer for one year, he cannot go as 1st officer until he has been second officer, and he cannot go as second officer until he has been in the deck department a certain length of time. This leaves the American steamer to be commanded by men who have been educated in foreign tramp steamers, men who are more out of place on an American steamer than the captain of a coasting schooner."

It is becoming more and more apparent that the Steamboat Inspection Service, as a branch of the Treasury Department, and having almost an absolute legislative control over the United States merchant marine, both in sail and steam, may be compared, in nautical parlance, to a waterlogged craft that no one can handle, a positive detriment and danger to everything that's not keeping a bright lookout, and, the sooner the Secretary of the Treasury re-organizes the Board, by removing the incompetents, the earlier will be brought about the rehabilitation of the merchant marine.

ENDORSEMENT OF TOBIN BRONZE.

OFFICE OF JOHN N. ROBINS CO., AGTS. OF ERIE BASIN DRY DOCKS AND PROPRIETOR OF SHIP YARD, ENGINE AND BOILER WORKS. OFFICE 15 WHITEHALL STREET. NEW YORK, May 23, 1900.

Ansonia Brass & Copper Co., 99 John St., New York City.

Gentlemen: We take a great deal of pleasure in stating that we have used "Tobin Bronze" manufactured by your company for over twelve (12) years, and find that it has given us entire satisfaction in every way, and it would be difficult to imagine any metal better adapted for our purpose. We use it continually for bolts, piston rods, pump plungers, valve stems and in fact all purposes where a strong non-corrosive metal is required.

The metal has proved itself so valuable in our business that we can not too strongly endorse it, and any services we can be to you in furthering the sale of this metal, we will be pleased to render.

W. D. DICKEY, Supt. JOHN N. ROBINS CO.,

THAT STEAMBOAT INSPECTION SERVICE.

The RECORD said last week: "We wonder what that ard of Supervising Inspectors meet annually at Washing- n for anyway, each year they perpetrate a series of blun- rs, making confusion worse confounded under the shadow the acquiescence of the Secretary of the Treasury, and y actually seem to be going from bad to worse in the litical appointments of Supervising Inspectors of districts."

Touching upon the same subject from another stand- nt it was stated that: "No wonder the Board of Super- ing Inspectors lose their bearings in the fog of conglom- te recommendations, counsel and advice offered them nually from outside sources. Their own idiosyncracies ould keep the brain box of a 'Philamayork' lawyer on the hirl, without the revolutions being accelerated by the luna- c effusions of other careless jokers."

Now comes along the American Shipbuilder, New York, ith a leading editorial under the caption of "That Absurd uling," moderately pitching into the nest of 'nincompoops' nown as the Board of Supervising Inspectors of Steamboats, nd quoting a very pertinent communication from the Re- ublican Journal, Belfast, Me.

The views of the RECORD are endorsed in the following train:

"The recent ruling of the Board of Supervising Inspectors f Steam Vessels is constantly receiving censure from the hipping community along our coasts. It is a grave calam- ty that mistakes of this character are being made by men who preside over the steam vessel interests of this country."

The latest absurdity reads:

"And no original license as master (or mate of ocean teamers, or of coastwise steamers plying upon waters of the ocean or high seas) of ocean or coastwise steamers shall be ssued to any person who has not had three years' experience n steam and sail vessels preceding the application, one ear of such experience to be as chief mate of steam vessels. No original license as chief mate of ocean or coastwise steam vessels shall be issued to any person who has not had three years' experience on steam or sail vessels, and must have served one year as second mate of steam vessels, such service to be immediately preceding the application. No original license shall be issued to second mate of ocean or coastwise steam vessels who has not had three years' experience in the deck department of steam or sail vessels immediately preceding the application, one year of such service to be on steam vessels."

The ruling would be appropriate for those sailormen whose experiences extend no further than on a North river sloop, but it is not necessary for men of varied experiences of today. We ask how many are there in the Steamboat Inspection Service who have had the experience that the new measure calls for? A proper ruling would be one to compel the men who compose this service to be thoroughly practical and be able to decide what is best for safe navigation. It is not the place for incompetents. A correspondent of the Republican Journal of Belfast, Me., writes to that paper as follows:

"This ruling of the inspectors myself, and a great number of maritime men that I have conversed with, all concur with their protest and say that it is a monstrous shame and nothing less than an arrant humbug. To elucidate, a captain of the right calibre who has become famous for making quick passages, noted for his ability and judgment, must now ship in the forecastle and serve at least one year in a steam vessel before he can be even a second mate. Almost any sciolist knows that our most able steamship captains formerly walked the poop in charge of a sailing ship. A greater imposition was never offered to the American shipmaster. A well known noted firm are now building four 10,000-ton steamships, having disposed of their large sailing fleet, and have selected four masters that were in their employ to have charge of the steamships. These captains are known to have a ripe experience and are skillful managers to look after their valuable property. Have these captains got to serve on board some tramp steamer three years before they are eligible to take charge of these steamships? Is this justice to the maritime shipmaster? This is not only absurd, but is preposterous. The government should scrutinize carefully the fitness of the supervising inspectors chosen to the understanding of privileges and responsibilities. When the right men are in the right place we shall have just cause for glorifying our country and exulting that our flag floats over no arbitrary or tyrannical laws."

As a proof that the MARINE RECORD has not been remiss or dilatory in calling attention to this peculiar arm or branch of the Treasury Department, our files bear ample testimony, quoting from recent issues we find in Vol. 23 No. 10 issue of March 8, the following:

"Oh, but that ubiquitious Board of Supervising Inspectors of Steamboats put their feet into it everywhere. At the last annual meeting, held a few weeks ago in Washington, they revised an amended amendment, and made themselves, also the Secretary of the Treasury, say port when they meant starboard, or vice versa, it matters little which. Then they revised the code of signals between the master and engineer in accordance with the suggestion of a Cleveland vessel manager, but they revised it so as to leave out the checking signal altogether. It was also understood that lake barges of 700 tons and over, carrying canvas, did not need a licensed master, but the examination has been put to a couple of them. One of the brilliant constellation of talent, yclept, the U. S. Board of Supervising Inspectors of Steamboats, ordered his local inspectors to convey information that the MARINE RECORD had written for and worked up, to be given to another periodical, thus turning his locals, pro tem, into reporters. Then, these little matters are laughed off with that idiocy of ignorance as if to the manner born. A wonderful bureau, truly"!!!

The foregoing called for a screed from the newly made supervising inspector, who delights to see his numbers exhibited in cold type over any old space-filling effusion, by his numbers, we mean his name, a-la-international code of signals, of which it is presumed that he knows as much about as the fifth wheel of a coach.

Again, passing over the digression, we find the following notes in the MARINE RECORD, Vol. 23, No. 15, Apr. 12:

"It is perfectly mysterious why the Secretary of the Treasury can't or won't straighten out that Steamboat Inspection Department of his. The civil service code may hold him up for a brief stage, but startling incompetence can't always exist."

"The RECORD never trenches upon politics, but we can't refrain from saying that President McKinley should touch up, his, or rather, the Treasury Secretary, relative to his appointments of Supervising Inspectors to the Steamboat Inspection Service. We can't afford this branch to get rotten any more than any other."

"And now that the U. S. Steamboat Inspection Service wants to examine a licensed officer every fifth year, suppose it examines itself once in a while. The competent of to-day may be the incompetent of to-morrow, according to their horrible ruling. The locals may be meddling, but the Lord save us from some of the Supervising Inspectors of the United States Steamboat Inspection Service, otherwise ycleped, runners for mechanical journals and fresh water laborers."

The foregoing is amply sufficient, we think at this time, to show that the RECORD, at least, is camping on the trail of some of these assumptive incompetents. In all truth and justice, we are constrained to aeknowledge that there are some of the best men in the country on the Board, men who are masters of their calling, as well as being educated and trained to and with gentlemanly instincts, but of such is not the majority.

SUN'S AMPLITUDES.

The following approximate amplitudes of the Sun's rising will be given each week in this column during the season of navigation. A second bearing may be taken by compass at sunset, by reversing the east bearing given for the nearest latitude, as the change in declination for a few hours makes but a slight difference in the true bearing of the Sun's setting. The bearing may be taken when the Sun's center is on the horizon, rising or setting. The elements which may be obtained by taking these amplitudes are the quantities known as local attraction, variation and deviation, or the total difference between compass and true, or geographical bearings.

LAKE ERIE AND S. END LAKE MICHIGAN, LAT. 42° N.

Sunrise.	Amplitudes.	Bearing P'ts.	Bearing Comp.
June 1.....	E. 30° N.	= N. 5⅜ E.	= N. E. by E. ⅜ E.
June 8.....	E. 30° N.	= N. 5⅜ E.	= N. E. by E. ⅜ E.

LAKE ONTARIO, S. END HURON AND CENTRAL PORTION LAKE MICHIGAN, LAT. 44° N.

Sunrise.	Amplitudes.	Bearing P'ts,	Bearing Comp.
June 1.....	E 31° N.	= N. 5¼ E.	= N. E. by E. ¼ E.
June 8.....	E. 31° N.	= N. 5¼ E.	= N. E. by E. ¼ E.

N. END LAKES HURON AND MICHIGAN, LAT. 46° N.

Sunrise.	Amplitudes.	Bearing P'ts.	Bearing Comp.
June 1.....	E. 32° N.	= N. 5⅛ E.	= N. E. by E. ⅛ E.
June 8.....	E. 32° N.	= N. 5⅛ E.	= N. E. by E. ¼ E.

LAKE SUPERIOR, LAT. 48° N.

Sunrise.	Amplitudes.	Bearing P'ts.	Bearing Comp.
June 1.....	E. 34° N.	= N. 5 E.	= N. E. by E.
June 8.....	E. 34° N.	= N. 5 E.	= N. E. by E.

With a compass correct magnetic, the difference between the observed and true bearing or amplitude will be the variation for the locality. Should there be any deviation on the course the vessel is heading at the time of taking the bearing, the difference between the observed and the true amplitude after the variation is applied will be the amount of deviation on that course. If the correct magnetic bearing is to the right of the compass bearing, the deviation is easterly, if to the left, the deviation is westerly.

One of the eighty-five Shaw & Speigel steam towing machines in use and manufactured by the American Ship Windlass Co. is on the steamer Kvichak, recently launched by the Wolff & Zwicker Iron Works., Portland, Ore. This steamer has also received a steam windlass and a steam cargo hoisting winch of the American Ship Windlass Co.'s manufacture.—The Army and Navy Journal, New York.

SHIPPING AND MARINE JUDICIAL DECISIONS.

(COLLABORATED SPECIALLY FOR THE MARINE RECORD).

Collision—Negligent Navigation of Tug with Tow.—It is as much the duty of a tug with a tow to so shape her course as to prevent collision by a crossing vessel with her tow as with herself, and a failure to excercise due care in that regard will place her in fault for a resulting collision. The America, 100 Fed. Rep. (U. S.) 883.

Collision—Sailing Rules—Change of Course.—A variation of half a point in a sailing vessel closehauled or hove to—in which case she is regarded the same as a vessel under way and closehauled—does not constitute a change of course, within the rule requiring a privileged vessel to maintain her course. The Columbian, 100 Fed. Rep. (U. S.) 991.

Steamer and Sailing Vessel.—The fact that a schooner had no one at the helm, which was lashed, or that she was insufficiently manned, cannot be held a fault contributing to a collision with a steamship in a fog at night, when in any event it would have been her duty to keep her course, and she did this. The Columbian, 100 Fed. Rep. (U. S.) 991.

Collision—Steamer and Sailing Vessel—Contributory Fault.—The rule applied that where a steamer was confessedly and grossly in fault for a collision with a schooner, by reason of her excessive speed in a fog at a place where she had reason to apprehend danger, any doubts as to fault in the schooner contributing to her injury will be resolved in her favor. The Columbian, 100 Fed. Rep. (U. S.) 991.

Suit for Collision.—A ship which, in a suit for collision, claims, and is found, to have been the privileged vessel, cannot be excused for disregarding the duty to keep her course, imposed by such privilege, except upon such ample evidence of justification; and where, but for her failure to observe such requirement, the collision might not have occurred, she must be held in fault therefor. The Queen Elizabeth, 100 Fed. Rep. (U. S.) 874.

Torts—Enforcing Laws of Foreign Nation.—In cases arising in tort upon the high seas a court of admiralty of the United States cannot enforce the local law of a foreign nation, even if in terms it applies to the case, on the ground that the alleged cause of action arose upon a vessel of that nation, but such cases must be adjudged by the general maritime and admiralty law as understood and administered by such courts. Rundell vs. La Campagnie Generale Transatlantique, 100 Fed. Rep. (U. S.) 655.

Collision—Striking Vessel at Wharf—Fault of Moving Vessel.—A vessel passing a wharf in the daytime, and with plenty of searoom, which comes into collision with and injuries a vessel there moored, is not exonerated from fault by the fact that the injured vessel was moored in an improper place. In such case the moving vessel must be held in fault, unless she shows that it was not in her power, by adopting any practicable precaution, to prevent collision. The Nettie Sundberg, 100 Fed. Rep. (U. S.) 886.

Treaties—Consular Convention with Germany—Right of Consul to Represent German Subjects.—Article 8 of the consular convention between Germany and the United States, of December 11, 1871, authorizing German consuls to act as legal representatives of the German emperor's subjects, does not constitute such consuls administrators of deceased persons, or authorize a consul to recover wages due a deceased seaman who was in life a German subject, unless he represents heirs who are entitled to the money and who are German subjects. The Gen. McPherson, 100 Fed. Rep. (U. S.) 860.

Collision—Steamer Striking Grounded Vessel.—The steamer City of Macon, passing down the Savannah river, struck and injured the Teviotdale, which was aground across the center of the channel, though with room to pass on either side. She had been aground for some time, and was known to be by those in charge of the Macon, who could see her for several miles back. On approaching, the Macon's signal was answered by a cross signal from the Teviotdale, from which the captain of the Macon concluded, as he testified, that she was in motion. Held, that there was no justification for such conclusion, the grounded vessel being in plain view, and that it did not relieve the Macon from the presumption of negligence arising from the collision. The City of Macon, 100 Fed. Rep. (U. S.) 139.

Liability of Vessel—Injury to Ocean Cable—The anchor of a schooner became entangled in an ocean telegraph cable, and in order to release it the officers cut the cable. The schooner remained at the same place until the following morning. There was no reason why she could not have cut away the anchor when ready to proceed, having another anchor on board. There was testimony that the vessel was within anchorage grounds, and hence not guilty of negligence in becoming entangled, and the cable was lawfully laid and maintained where it was. Held, that in view of 25 Stat. c. 17, § 3, which provides that a cable shall be cut only when necessary to save life or limb or a vessel, and of article 7 of the treaty of 1884, which requires cable companies to reimburse vessel owners for anchors sacrificed to avoid injury to a cable, the officers must be held guilty either of willful injury to a cable, or culpable negligence, for which the vessel was liable. The William H. Bailey, 100 Fed. Rep. (U. S.) 115.

MARINE RECORD

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CLEVELAND, O., MAY 31, 1900.

LABOR troubles still exist at several lake ports. Buffalo and Milwaukee are the two most marked, though discontent and mutterings are heard at other ports.

BUSINESS is brisk with the various lines of lake passenger steamers, and it is generally expected that this season will show a larger traffic than has ever been known before.

NOTWITHSTANDING his suspension from duty, we notice that Commander C. C. Todd, U. S. N. Hydrographer, still signs the hydrographic office "Notices to Mariners" under date of May 26th. We hope that Commander Todd will come out of the inquiry started by J. G. Cannon, M. C. from Illinois, with flying colors, but at present the odds seem against him; still a naval officer ought to be given a little latitude to veer and haul upon the same as any other loyal and patriotic citizen.

IN an official inquiry of a collision between an iron tug and another steamer held recently before Supervising Inspector Starbuck of New York, he put the question to a witness, "Were there any bruises or surface wounds on the starboard side?" This sounds a good deal like the talk of an umpire after a pugilistic show. Bruises and wounds on the upper strake of a vessel's shell-plating is delightfully unique phraseology in speaking of the violent concussion caused by a collision. The Supervisor's locals also took oath, or made affirmation, statement, or documentary assertion, in some old way or another, that the damage as described above was all on the starboard side, whereas a photograph taken shortly after the collision showed it to be on the port bow. And of such are the kingdom of experts.

IN licensing pilots, the draft of water usually rules the grade of their license or branch, as for instance, a junior may not pilot a vessel drawing over say 12 or 14 feet, while a full branch pilot may take charge of any craft. It is the draft of water that counts and not the size of a hull. A large vessel in ballast trim will draw less water than a medium sized loaded vessel. The majority of modern built lake steamers load to the same depth, say 17½ feet, but lake pilots are licensed according to the length of the hull. In other words, it is no more difficult to ground a 400 foot craft than it is one of 350 feet, providing they are both loaded to the same draft, but the local inspectors of steamboats, who are also the licensing board, can't, or don't, see it in that way, therefore, with some peculiar idea of protecting themselves from possible afterclaps, they exercise their functions in limiting the liability of a pilot to vessels of a certain length and tonnage.

THE Marine Journal, New York, persists in calling the auxiliary branch of the U. S. Navy, Naval-Militia, a compound term which may be more commonly rendered in the vernacular as sailor-soldier. Naval Reserves may be known and understood as reserve forces of the navy and such is their raison-d'-etre, any other construction placed upon the term can be told to the marines as it wouldn't be taken aboard by any one that could knot a ropeyarn. However, they seem to be a sort of a hybrid conglomeration anyway, as our contemporary has the following praiseworthy? remarks anent the corps in its last issue.

"Whoever the fault may be with, there certainly seems to be something wrong for which there ought to be a remedy in regard to the fact of the Naval Militia of five states refusing this year to take their annual cruise on the ships of the navy provided for that purpose. The organizations referred to are those of New York, Massachusetts, Florida, Maryland and South Carolina, although it has been published that some of the Maryland men were willing and anxious to go. The explanation given in our last issue from a New York man, that the battalion of this State refused to sail under naval officers because they had not been fairly treated, would seem to demand an explanation from the Navy Department. But if the Naval Militia, as a national force, receiving Congressional aid and having a regular naval ship placed at their disposal for deep sea excercise, are not to be amenable to federal authority, it is time the nation knew it and the sooner that a national naval reserve is organized the better."

Well! on due consideration of the foregoing editorial utterance, p'raps Editor Norton is not so far to leeward in calling the naval novices, sailor-soldiers, thereby venting his satirical irony on a body of abortives, who refuse to sail under duly qualified naval officers and yet wish to retain the semblance of a national organization. We would like to point out further incongruities regarding the present formation, etc., of the Naval Reserve Corps, but space forbids. There is no question, however, but that all right thinking people will heartily coincide with the sentiment expressed by our contemporary in the last sentence of the quotation.

THE Chief Hydrographer, Commander Todd, U. S. N., has been suspended from duty pending an investigation by the Secretary of the Navy regarding some correspondence sent out from the Hydrographic Office, Washington, D. C. And supposed to have had more or less of a political bearing. The plain fact might as well be fully admitted, that naval or military officers are not fitted by education or training to make a good showing in the arena of politics, statesmanship, or as international diplomatists in statecraft. The country educates or trains them and then provides permanent employment ashore or afloat with fair compensation, up to the period of pensioning or superannuation, they should therefore, eschew legislative log-rolling during their period of active service, and this, we understand, is an iron bound rule of the Navy Department. There has been far and away too much gush ventilated through cold type, emanating from members of both arms of the National Service during the past few months, and of which the Navy has had its full quota. The general public have been Slyly, Sampsonized, Hobsonized and Deweyized to repletion, therefore, we would say, let every man stick to his trade and the cobbler to his last, the sailor to his ship and the soldier to his musket, and each according to their calling.

IT is stated in the Meteorological Chart of the Lakes for May, published by the Weather Bureau, that the precipitation for the month of April and the first half of May was generally deficient, not only in the Lake region, but also in much of the territory contiguous thereto. The snowfall of April in northern Minnesota, the upper peninsula of Michigan, and on the Canadian watershed of the upper Lakes was also considerably below the normal, and it had generally disappeared by the middle of the month. Roughly speaking the precipitation on both the American and the Canadian sides during the last eighty-one days (March 1 to May 21) has been only about 75 per cent. of the normal. The foregoing data considered in connection with contemporaneous statistics of rainfall for the Lake region seem to confirm the belief that the annual high water on all the Lakes would be reached sooner than usual, and that the general tendency would be toward lower levels.

FROM a preliminary report of a Board of Engineers appointed to make a survey and estimate of cost for the improvement of the Upper Illinois River and Lower Des Plaines River, in Illinois, with a view to the extension of navigation from the Illinois River to Lake Michigan at or near Chicago, the commission stated that the subject is of such extent and importance that it has been found impracticable to present a full report for the information of Congress during its present session, hence, a brief preliminary report has only been submitted. The trustees of the Chicago Drainage Canal strenuously maintain that nothing derogatory to the interests of navigation has taken place through the opening of the immense sewer. Quoting from the above report of the Board of Engineers, it is stated that:

"The congested state of the Chicago River and the increased difficulty of navigating it in the strong reversed current caused by even the present limited flow into the drainage canal lead the Board to fear that the full flow of 10,000 cubic feet per second, which will soon be required by law, would make additional traffic through this river impracticable."

The foregoing statement, emanating from such a highly qualified, expert and scientific board of engineers, should go far towards strengthening the position of the special committee of the Lake Carriers' Association having in charge the present unnavigable condition of Chicago River. The report, signed by Col. J. W. Barlow, Major J. H. Willard, and Major C. McD. Townsend, of the Corps of Engineers, U. S. A., was submitted through the Chief of Engineers to the Secretary of War, Hon. Elihu Root, and thence transmitted to Congress through the Speaker of the House of Representatives.

Now that an examination by the local inspectors of steamboats is necessary, before a man can take charge of a sailing vessel of 700 tons and upwards, it would be in order to make the examination inclusive enough to cover steam as well as sail. A candidate for a master's license should be master of his calling in all its branches, or not be entitled to a license at all. As the law now stands, a shipmaster may have held command, under canvas, for half a century, and yet not be eligible, or considered competent to shape the course of a steamboat until he had dragged around in one for several years. We also hear many complaints regarding the arbitrary rulings of local inspectors in limiting licenses as regards tonnage, that is to say, an officer (pilot or engineer) is allowed to use his license on a 2,000 ton boat with say triple-expansion engines, but, he can't sail on a 3,000 ton boat with quadruple-expansion engines, and all at the sweet will, notion or whim of the local inspectors for the district where the examination takes place. A case in point recently brought to our attention reflected sadly on the judgment of the local examiner. In this instance, a junior officer had for several seasons kept the starboard watch on a boat, but on getting a higher grade of license he could not accept a berth on a steamer a few hundred tons larger, on account of the discreet ? local examiner limiting the size of a boat he should sail in. This ludicrous limited license fad should be done away with, and be replaced by a proper technical examination for masters and pilots, with a tradesman-like examination for engineers.

IN the navigation and handling of a vessel under sail, the master and officers of the sailing vessel are fully as conversant with the duties of the officers of a steamer relative to the "Rules of the Road" and the proper action that the vessel under steam ought to take, as they are of their own. The Supervising Inspectors, constituting the advisory board to the Secretary of the Treasury, appear not to know this. If we muster the Supervising Inspectors together and include the Supervising Inspector General of steamboats, how many (if any,) of them could "heave a ship down" for calking, or patching, step her spars and rig her from deck to truck, tack, wear, box-haul, club-haul, wear her short round on her heel, or do anything at all with her, pshaw, they rather deteriorate the service and place stumbling blocks in the way of those desiring to advance in the laudable calling of shipmasters of the American merchant marine service.

THE marine insurance companies have laid an embargo on flour exports through the port of New Orleans, by raising insurance rates to a prohibitive point. The reason given for the raise is that two cargoes of flour were damaged, one by weevil and the other by being stored alongside of lumber, and thereby acquired a disagreeable flavor from the wood. The insurance companies were called on to make good the loss, and they have fixed the rates on flour shipped through New Orleans about 150 per cent. higher than rates on shipments through Eastern ports. So that stopped all shipments of flour through New Orleans. Mr. Herbert Bradley, the export agent of the milling interests of the Northwest, was in New Orleans recently to try to secure a resumption of the flour traffic. He says that at least five or six million barrels of flour ought to go annually through the Gulf ports to foreign countries and the West Indies.

IT was formerly heralded from Chicago, and with some degree of pertinency, that a series of casualties, such as strandings, collisions, etc., took place during every fog experienced on the lakes, if it was only of a few hours duration, or extended over any appreciable or well-frequented area. It is worthy of the most marked attention that all this has now changed, with the occasional exception that but proves the assertion. We find large steel steamers fitted with electric installations, loaded with ores of varying magnetic power, or sailing flying light all down by the stern, and generally under conditions that would bewilder, if not appal the ocean navigator, yet lake shipmasters seldom make a bad landfall, moreover, passages are made on nearly schedule time. To a close observer the successful handling of large lake tonnage seems almost miraculous, and speaks in the highest terms of the technical efficiency of the officers in charge of these vessels. That eminent authority on magnetism, Dr. Scoresby, arrived at the conclusion that no continued accuracy of guidance could be relied on in any compass exposed to the ship's full magnetic influence, for, as he said, the magetic "pull" varies inversely as the square of the distance, that the further we remove our standard compass from the disturbing influence of the ship (and by that is meant anything entering into the construction and equipment, as well as cargo)the more reliable the readings of that instrument may be. Dr. Scoresby to the contrary, notwithstanding, compasses are adjusted on the lakes, in new or old vessels, when they are loaded with grain, iron ore, railroad iron, coal, or any other cargo, including general, or light, when they are all down by the stern, and this, too, when a pole or any other elevated compass is an unknown or unused quantity. Mark then, the safe conduct of huge, steel steamers, sailing under changed conditions, as regards their compasses, every few days, and then marvel at the practice, skill and technical ability displayed, not to keep these bottoms off the ground, but to make regular record passages from port to port, and with direct exactness, while "going over bridges and under arches" even in thick weather.

CASUALTY REPORT FROM APRIL 26 TO MAY 15.

April 26.—Schooner Cape Horn encountered ice field in Lake Michigan off Manistee, causing her to spring a leak; estimated damage to vessel, $200.

April 28.—Steamers John W. Gates and Mariska collided in Whitefish Bay, Lake Superior, during defense fog; estimated damage to vessels, Mariska, $500; Gates, $5,000; total, $5,500.

April 30.—Barge B. L. Siler, during heavy sea and gale of wind became waterlogged off Thunder Bay Island; assistance rendered by the Thunder Bay life-saving crew, and barge proceeded with consort; estimated damage to vessel, $500.

May 2.—Schooner R. Hallaran sprung a leak, while in tow of steamer M. M. Drake, during a heavy northwest gale 8 miles off Stannard Rock, Lake Superior, and was abandoned and soon after foundered; no lives lost; estimated value of vessel, $11,000; cargo, $1,500; total, $12,500; total loss.

Steamer Queen of the West, with consort Sage in tow, stranded on Fisherman's Shoal during dense fog; released; estimated damage to steamer, $1,500; consort, $1,000; total, $2,500.

May 6.—Schooner Ida Corning, lumber laden, was damaged to the amount of $500 by ice while entering Buffalo Harbor through the ice field.

May 7.—Barge Dunmore, during heavy gale, collided with pier at Port Dalhousie, after breaking loose from towing steamer and was damaged to the amount of $1,000.

May 12.—Schooner J. F. Card collided with unknown steamer, during dense fog, about 10 miles off Thunder Bay Island, and had bow stove in; assistance was rendered by the Thunder Bay life saving station, and a tug towed her into Alpena, where the vessel sank at the dock; estimated damage to vessel, $800. The use of the Weather Bureau telephone line to Thunder Bay Island gave prompt assistance of the tug, which made it possible to tow the vessel into safe harbor.

Schooner Thomas Howland sprung a leak in the ice 6 miles out of Buffalo Harbor and foundered in 40 feet of water, a little to the north and inshore from the regular vessel channel; about one-third of her spars are visible; the crew escaped to the tug, but lost all clothing; estimated value of vessel, $6,000; cargo of coal, $3,000; total, $9,000; may be raised.

Lyman E. Cooley, C. E., of Chicago, is expected to give five lectures on the "Industrial Significance of the Deep Water Way Communication," at the University of Michigan, Ann Arbor.

LAKE FREIGHTS.

There is but little change to report in the condition of the freight market since last week, except that the rates on grain from Duluth are a trifle firmer.

Coal—From Ohio ports is still at the former rates, viz. 70 cents Chicago, 65 cents Milwaukee, 60 cents Manitowoc, Sheboygan and Green Bay, 50 cents Escanaba and Duluth. From Buffalo 5 cents additional to the two former ports and Marquette, Toledo 40 cents, last week's shipments were 62,000 tons, of which Chicago took 20,000, Duluth-Superior also Milwaukee about 16,000 tons each and the remainder scattered over various ports.

Grain—The Chicago rate is firm at 1¼ cents on corn, and 2¼ cents on barley to Buffalo, 2¾ cents to Lake Ontario, Port Huron 1¼ cents, Middlesex 1 cent on oats. Duluth shows a slight rally with shippers offering 2¼ cents on wheat and 2½ cents for next week's loading.

Iron ore—The quoted rates are $1 from Duluth, 90 cents Marquette and 70 cents Escanaba to Ohio ports with a 10 cent increase to Buffalo on several charters.

Lumber—Lumber carriers held firmly at $2.75 from the head of the lakes, but at last gave way and accepted $2.50 per M feet as a going rate, also $1.75 from Lake Michigan ports and Georgian Bay to Lake Erie ports, an effort is being made to cut the rate to $1.50 from the latter vicinity.

THE "SOO" POWER CANAL.

Chairman Burton, of the Rivers and Harbors Committee, has filed the bill and report on the Sault Ste. Marie water power canal project, which has attracted much attention throughout the Great Lakes region. The report states that the power canal expects to secure 40,000 effective electric horse-powers from dynamos operated by turbines and is an extensive commercial undertaking. The inflow of this canal is just above the entrance to the ship canal constructed by the United States government, and leading to the lock at Sault Ste. Marie. In view of possible dangers to navigation, and after conferences between representatives of the Lake Carrier's Association and of the Michigan-Lake Superior Power Co., the bill was presented. It fixes obligations to maintain the proper levels in all channels, natural or artificial, provides for the construction of controlling works, gives the Secretary of War absolute authority to regulate the power canal, and in case of danger to navigation, to take possession of the canal and adopt such means as are necessary in the interest of navigation. The provisions of the measure are said to be entirely satisfactory to the Michigan-Lake Superior Power Co., which was represented by Attorney John C. Shaw, Esq., of Detroit, who has worked unceasingly and with talented energy in the interests of the Power Canal Co.

THAT DULUTH "TWO TUG RULING."

DULUTH, May 28, 1900.

To the Editor of the Marine Record:

The Licensed Tugmen's Protective Association No. 1, of Duluth, feel that there is considerable misunderstanding in regard to the "Two Tug Rule." We hope you will kindly place before the public the facts, namely:

The local association, known as No. 1, were not in sympathy with the "Two Tug" action. The rule was made by a very few members of the local association. It was strictly an individual action of those few, and was unauthorized and unprotected by the local association for the reason that it has never been brought before that body officially.

CAPT. EDGAR BROWN,
President L. T. P. A. No. 1.

NOTICE TO MARINERS.

LIGHT-HOUSE ESTABLISHMENT,
OFFICE OF THE LIGHT-HOUSE INSPECTOR, 11TH DISTRICT,
DETROIT, MICH., May 28, 1900.

The wreck of the schooner Leader lays about 1 mile off the N. E. end of Belle Isle, Detroit river, and about 1700 feet E. N. E. ¾ E. from the red and black horizontal striped buoy marking the end of the shoal to the N'd. and E'd., of Belle Isle.

This wreck has this day been marked by a red and black horizontal striped spar buoy, which is lowered in 22 ft. of water close to and off the N. E. end of the wreck, which has but five feet of water over it. The buoy should be given a wide berth in passing.

A white hand lantern will be hung on the buoy during the night.

By order of the Light-House Board. J. C. WILSON,
Commander, U. S. Navy, Inspector, 11th District.

TO ENLARGE THE ERIE CANAL.

Representatives of sixteen commercial organizations met in New York Tuesday to confer in relation to the 1,000-ton barge canal movement. The object of the meeting was to organize a plan of co-operation in the matter of improving the Erie canal and to start an educational campaign for the purpose of arousing enthusiasm.

The chairman of the meeting, Mr. H. B. Herbert, urged that the conference take action looking toward immediate and vigorous agitation of the canal project, in default of the accomplishment of which, he said, the commerce of the State must inevitably decline.

The commercial bodies represented were: The Chamber of Commerce, Board of Trade and Transportation, Merchants' Association, National Wholesale Lumber Dealers' Association, Maritime Association of the Port of New York, Cotton Exchange, Real Estate Exchange, Canal Boat Owners and Commercial Association of the State of New York, Canal Forwarders' Association, Mercantile Exchange, Manufacturers' Association, North Side Board of Trade, Staten Island Board of Trade, New York Lumber Trade Association, Italian Chamber of Commerce, Wholesale Grocers' Association, and Oil, Varnish and Paint Club.

A resolution was passed that the representatives of these bodies be formed into one organization, to be known as the Canal Association of the Port of New York, and that the chairman appoint an executive committee, including himself, to attend the convention of commercial bodies at Syracuse on June 6 and 7.

Canada's activity in canal improvement is shown in the report of the Minister of Railways, and Canals, just presented to the Dominion Parliament, which gives the following statistics: The total expenditure charged to capital account on the orignal construction and enlargement of the several canals of the Dominion up to June 30, 1899, was $76,404,279.16. A further sum of $15,632,242.84 was expended on the repairs, maintenance, and operation of these works, making a total of $92,036,522. The total revenue derived, including tolls and rentals of land and water powers, amounted to $12,079,274,46. The total expenditure for the fiscal year ending June 30, 1899, including canals in general, was as follows:

On construction and enlargements, a total of $3,809,877,31. and a further sum of $633,315.61 for repairs, renewals and operation, making a total for the year of $4,533,192,92.

U. S. LOCAL INSPECTORS OF STEAMBOATS SHUNTING THEIR DUTIES.

Apropos of the limited license bugaboo, we note in the annual report of the Grand Executive Committee of the "American Association of Masters and Pilots of Steam Vessels" the annexed communication bearing on this subject:

ELIZABETH, N. J., January 17th, 1900.

CAPT. L. B. DOW, G. P., 974 Madison St., Brooklyn, N. Y.

Dear Sir and Bro.: I write to inform you that I have at last got the required tonnage on my license, that I have been running after to the U. S. Local Inspectors for the last three months, and I suppose I would still be going there if it had not been for the letter you gave me to hand to Capt. Petrie.

Now this is a case of where I held a master's certificate for eighteen or nineteen years, and all I wanted was a raise of tonnage from 150 to 500 tons on account of our new boat being larger than the old one, on inland steamers on the same routes; still Capt. Petrie forced me to go to my employers for letters stating the length of time employed by them, and also letters from licensed men in New York harbor stating that they thought I should have a raise of tonnage, and after going to all that trouble, humiliation and expense, he still held me off on the plea that he was too busy to attend to me on that day—after being there about eight or nine times. Fortunately I ran across you and got your letter to him, which he read and immediately granted my request.

It is evident that you, or the Association you represent, or both, must have considerable influence in that office, and that brings to my mind the fact, that considering what you have done in my case and several others that I have heard of, that you were interested in the organization, that it would not be out of place to bring these matters before the delegates at our next Convention, and impress on them the necessity of having some one of ability that is acquainted with the laws, usages, etc., of the U. S. Local Inspectors office, to represent our interests there.

It is a well known fact that if an individual should get into trouble and goes before the Local Inspectors he has a poor chance, but with our grand organization behind him and some one to place the facts before the proper authorities, he will surely get justice, which is all we ask.

Thanking you very kindly for your interest in my affair, I am

Fraternally yours,
JAS. A. COX,
Jersey City Harbor No. 6.

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THE SHRINKAGE OF LAKE NICARAGUA.

SANDUSKY, OHIO, May 28, 1900.

To the Editor of The Marine Record:

I find in the Scientific American, in the issue of May 19th, an article under the caption of "The Shrinkage of Lake Nicaragua," concerning the proposed construction of the "Isthmian canal." It certainly is a matter of vast import to the American people, and the deductions of the editor from the article by Prof. Heilprin, are based on undisputed facts. It ought to be known by our government, and in fact without unnecessary delay, so the facts may be known before it is too late. And it should be published broadcast throughout the land, that it might be brought to the attention of our law-makers in Washington. I know of no better channel than the MARINE RECORD through which it can be disseminated, that it may be brought before the thinking men of the country. I have the honor to request you to cause said article to be published in the next issue of the MARINE RECORD, that it may be seen by some who do not get the Scientific American.

I wrote to Senator Foraker last week calling his attention to the article, and requested him to get the Scientific American and read it up carefully.

When you publish it in the MARINE RECORD I hope you will send marked copies to our Senators and the members of Congress from Cuyahoga County at least.

Hoping that you may do so, I have the honor to remain,

Yours truly,
S. C. WHEELER.

The article referred to by our correspondent is herewith reproduced with full credit and anticipating the courtesy of the Scientific American:

In the current issue of the Supplement will be found an article by Prof. Heilprin, entitled "The Shrinkake of Lake Nicaragua," which is certainly the most significant, we had almost said dramatic, contribution to the literature of the Nicaraguan region that has yet appeared.

In our issue of February 24, the same author, whose geographical and geological attainments gave him eminent authority, showed that there is abundant evidence, drawn from the inconsistency of early recorded levels with those of later surveys, and from other phenomena, that there has been a gradual falling of the lake level. A reply to this article by Mr. C. Willard Hayes, geologist of the Walker Canal Commission, was published in the Supplement of April 28, and in the present article, while replying to Mr. Hayes, Prof. Heilprin fortifies the position taken in his former article, by proving from the records of rainfall, evaporation and outflow of the lake, furnished in the report of the Walker Commission of 1897-99, that there has been a shrinkage in the waters of the lake during the past twenty years.

It is evident that, if any doubt exists as to the permanence of the lake, a similar doubt exists as to the permanence of the canal; for not only is Nicaragua, with the canalized San Juan river, to form the major portion of the canal, but it is upon the maintenance of the lake at or above a certain specified minimum level that the very existence of the whole system depends. Should the waters of the lake in time fall below a level which should afford less than 30 feet (the proposed depth of the canal) at the points where the canal enters and leaves the lake, there would be absolutely no remedy for the disaster.

Does such a danger exist? Is there any evidence that the average losses by evaporation and outflow are in excess of the average gains by rainfall in the Nicaragua watershed? The question can be answered by gathering all the recorded data on the subject, and by a simple process of addition and subtraction, determining whether the volume of the lake is increasing, stationary or undergoing a steady shrinkage. The necessary data are furnished by careful records taken at Rivas, on the Pacific side of the lake, during the years 1880 to 1898 inclusive, and it is from these data that Prof. Heilprin has arrived at the discouraging conclusion "that the lake—unless, indeed, the official reports are inaccurate—has been steadily and progressively undergoing skrinkage, and that it must continue to do so in the future."

The determinations of altitude of the lake made by Galisteo, in 1871, and by Baily, in 1838, show that it formerly stood at a much higher level than that established by recent surveys, a fact which is confirmed by the report of Collinson to the Royal Geographical Society in 1867, who states that "even the least observant native, dwelling on the lake, will tell how its banks are rising year by year visibly before his eyes." The most comprehensive record of rainfall, evaporation, etc., is that contained in the report of the Nicaragua canal commission of 1897-99, which, although it makes no specific analysis of its own figures to determine the question of net gain or loss in the volume of the lake, does actually afford confirmation of the statements of the early engineers, as Prof. Heilprin shows in his article.

It is made plain from the report that the intake of Lake Nicaragua—rainfall and drainage from its drainage basin—is apparently for almost every year less than the output—the loss due to evaporation and outflow; while in exceptionally dry years the evaporation alone is greater than the entire intake.

From November 1, 1889, to June 1, 1891, the total rainfall would have raised the level of the lake 45.75 inches. The evaporation alone would have lowered it 95 inches, a loss, outside of what would have run off through the San Juan river, of over 4 feet. The aggregate loss during three dry spells, not taking count of outflow through the San Juan; was 10 feet 10 inches.

The compensations for such losses must be found in periods of extraordinarily heavy rainfall; but despite the fact that immediately after excessive rains the lake has been known to rise two feet in six weeks, the greatest net accession to the lake for any entire year, during a period of 20 years, was considerably less than 2 feet.

In the year 1898, when the rainfall was 108 inches, the net rise of the lake was only 18 inches, and a comparison of the records show that during 19 years of successive observations (1880 to 1898) there were not more than four periods, the years 1893, 1897, 1898 and possibly 1886, when the lake held its own, and during these years combined the actual gains were less than 5 feet. On the other hand, in the single year 1890, when the rainfall at Rivas was only 31.81 inches, the loss was as great as the gains for the entire 19 years!

In calculating the net result of all the causes of supply and loss affecting the lake level, the average recorded evaporation is taken as 55 inches, and the outflow through the San Juan as 42 inches, or one-half the amount in the extremely wet season of 1898. On this basis there is a total loss of 363 inches as against a total gain of 114 inches, or a net loss of 20 feet 9 inches. From this result the author of the paper concludes that for a long period of years Nicaragua has undergone a very marked and progressive shrinkage.

It is true that the outflow through the San Juan may be controlled and water may be stored in wet seasons against the deficiencies due to drought; but although the evil day may be thus postponed it is only a question of time, if the lake be steadily shrinking, when the surplus storage will be inadequate to meet the ever-growing deficiency.

We agree with the author of this paper that "it is hardly less than amazing that these reports should not have been analyzed before, and their bearing given full consideration;" and, we trust, that Congress will recognize, in the grave considerations thus presented, a further inducement to await the results of the searching investigation which is now being made by the President's commission.

THIS is a fine time for the sailor man on the Pacific coast, as the rush to get crews for vessels to Alaska and other coast points has advanced the wages of able seamen from $25 to $40 a month. Even at these rates it is difficult to get crews, and captains shipping men for Cape Nome and St. Michaels must guard against sailors deserting to try their luck at the mines.

AUTOMATIC RELEASING HOOK.

A DEVICE FOR THE LOWER BLOCK OF DAVIT TACKLES.

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MR. JAMES R. RAYMOND.
17 State St., New York.

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It is certainly a most important item of a vessel's equipment, and should be adopted on all vessels.

I remain very truly yours,
GEO. H. GODDARD,
Master U. S. Light-House tender Cactus.

By reference to "Standard Boats, U. S. Navy," issued by U. S. Navy Bureau of Construction and Repairs, Plate 153, it will be seen this entire plate is devoted to a description of the Standard Automatic Releasing Hook.

We also note the following testimonials sent to the Standard Automatic Releasing Hook Co., of 17 State street, New York, as but few of many of similar character which that firm is in the habit of receiving:

"To Whom This May Concern: We, the undersigned masters of the following named ships of the Old Dominion Line Steamship Co., do hereby state that our ships are equipped with the Standard Automatic Releasing Hook for boats, and we unhesitatingly say that we know of no releasing device to equal the Standard Automatic Releasing Hook, either for releasing or for hooking on, and we do not consider any ship fully equipped without it. Signed: Ira E. Dole, S. S. Yorktown; John G. Hulphers, S. S. Jamestown; R. B. Boaz, S. S. Roanoke; G. M. Walker, S. S. Guyandotte."

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STEAMSHIP CITY OF AUGUSTA, NEW YORK, May 24.

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Dear Sir: The hooks fitted to life boats on steamship City of Augusta I have tested in port and at sea. When I took off the passengers from the burning steamship Leona, I found them to work to my entire satisfaction and recommend them to all shipmasters and others.

Yours very truly,
H. C. DAGGETT, Master S. S. City of Augusta.

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1. Strictly automatic.
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4. It is in such a place in the boat as to be easy to inspect and keep free from ice.
5. A boat can be lowered and detached and allowed to drift to the assistance of those on a wreck without risking the lives of a boat's crew.
6. It can be easily and certainly hooked on in the roughest water, thus avoiding the delay and danger of the boats being smashed alongside.
7. The falls are so rove that both ends of the boat detach irrespective of which end strikes the water first.

A deck hand on the Marina named William Fairbanks fell overboard and was drowned. The boat was lying at Lorain on Friday last, the body was recovered, Fairbanks was twenty-six years old and hailed from St. Louis, Mo.

CIVIL SERVICE EXAMINATION FOR GOVERNMENT POSITION.

The United States Civil Service Commission announces examinations to be held in any city in the United States where it has a local Board of Examiners, for the following position:

June 18, 19, 20, for the position of marine engine draftsman. The Department states that for this position it desires a man who is a marine engine draftsman and who has had several years' experience as such in marine engine building establishments, and one who is familiar with the best and most recent practice in engine and boiler construction, and who is also able to make all calculations neccesary in working out the design of details in steam machinery. From the eligibles resulting from this examination certification will be made to the position of draftsman, marine engines, in the Bureau of Steam Engineering, Navy Department, at a salary of $1,400 per annum.

From the eligibles resulting from this examination certification will be made to the position of mechanical draftsman, Ordnance Department, War Department, at a salary of $1,200.

June 25, 26, 27, for the position of draftsman of marine engines and machinery. From the eligibles resulting from this examination certification will be made to the position of draftsman in the office of the United States Inspector of Machinery at Weymouth, Mass., at a salary of $4 per diem.

June 28, 29, 30, for the position of mechanical draftsman. From the eligibles resulting from this examination certification will be made to the position of mechanical draftsman at the League Island Navy Yard at a salary of $4 per diem.

These examinations will consists of the subjects mentioned below, which will be weighted as follows:

(1) Letter-writing	5
(2) Mathematics	15
(3) Materials	15
(4) Calculations	20
(5) Drafting	25
(6) Technical education and experience	20
Total	100

The examination will be divided as follows: First day, the first three subjects; second day, the fourth subject; third day, the fifth subject. Age limit, twenty years or over.

July 5, 6, 7, for the position of ship draftsman and assistant ship draftsman. Information relative to the scope of this examination may be found in section 57 of the Manual of Examinations revised to January 1, 1900. From the eligibles resulting from this examination certification will be made to the following named position: Second-class draftsman, Mare Island Navy Yard, salary $4.56 per diem; draftsman in charge, Portsmouth (N. H.) Navy Yard, salary $6 per diem; assistant ship draftsman, Crescent Ship Yard, Elizabeth City, N. J., salary $4 per diem; assistant ship draftsman, Norfolk Navy Yard, salary $4 per diem; second-class ship draftsman, at Norfolk, at $4 per diem. These examination are open to all citizens of the United States who comply with the requirements and desire to enter the service. All such persons are invited to apply, and applicants will be examined and graded with entire impartiality and wholly without regard to any consideration save their ability as shown by the grade attained in the examination. Persons who desire to compete should at once apply to the United States Civil Service Commission, Washington, D. C., for application forms 304 and 375, which should be properly executed and promptly filed with the Commission.

ORDERS were issued May 21 detaching twelve cadets from duty on board the New York and Texas and assigning them to duty with the torpedo station at Newport. Ten older officers will also be attached to the station. These officers will form a class which will receive wireless telegraphy instruction.

LITERARY AND BOOK NOTICES.

One of Miss Mary E. Wilkins's delightful heroines remarks, in speaking of certain would-be leaders of social reform in her village: "I don't know that I think they are so much above us as too far to one side. Sometimes it is longitude and sometimes it is latitude that separates people." "This is true," says Gov. Roosevelt in the June Century, "and the philosophy it teaches applies quite as much to those who would reform the politics of a large city, or, for that matter, of the whole country, as to those who would reform the society of a hamlet."

Frank T. Bullen, who is well-known to those who keep track of the literature of the sea, has brought out another book, "The Log of a Sea Waif," D. Appleton & Co., New York. In this, as the author tells us, in the preface, he aims to do for life in British ships what "Two Years Before the Mast" did for American sea-faring existence. Mr. Bullen's acquaintance with the sea is admirably shown in his accounts of the ships' behavior in storm and calm, and if parents who have boys possessed with a craving for sea glory would give them such books as these, their sons might be intelligently dis-illusioned, as were the two 'prentices on board the good barque Harrowby. The illustrations are good, and well selected.

A writer in The Review of the Week says: "A friend of mine reports from Wynberg that the nurses in the hospital there require a little supervision. He found a patient, a big Irishman, looking very melancholy. 'Are you not comfortable?' asked the visitor. 'As a prince,' replied the Irishman, 'barrin' the onraysonableness of the little woman wid the red hair. It is scouring me face she does be doin' five times in an afthernoon. "The Lord has given me a call to be a blessin' to you poor dear men," she sez, and then she does be dabbin me face again wid a sponge. An' manny's the time I lies on the broad iv me back and sez I to mesilf, 'Peter Docherty,' I sez, 'was it to Afriky ye came for glory an' a bellyful of fightin', or was it have the ould face iv ye shined up like a blessed milk-can on a Monday mornin'?'"

"Old Ocean's Ferry," the log of the modern mariner, the the Transatlantic traveler, the quaint facts of Neptune's realm. A collection of odd and useful information for nautical travel and strange features of the sea. For landsman and mariner. Compiled by John Colgate Hoyt, also "A Summer Journey to Brazil," by Alice R. Humphrey, with sixteen full-page illustrations, cloth, 12 mo., $1.25. This volume of easy reading proves that there is another "world to conquer" for the ubiquitous travelers, very pleasantly accessible. It gives many a hint of life on an English steamer in tropical seas, and of a part of the world hitherto almost unknown to American travelers. The Englishman knows it as he knows Australia, New Zealand, and as we are beginning to know the Sandwich Islands and Japan. The book contains many suggestions of value to merchants who may have international relations with South America, to philanthropists and to missionary readers. Published by Bonnell, Silver & Co., 24 West Twenty-second street, New York.

Cassier's Magazine of Illustrated Engineering has the following articles in its June number:

Trade Possibilities in South Africa. Prospects for the manufacturer and merchant. With twelve illustrations. By Edgar Mels.

Three Systems of Selling Pig Iron. The German, British and American methods. By George H. Hull.

Sixty Years in British Iron Works. A Retrospect. With sixteen illustrations. By George Beard.

Practical Inventing. Suggestions in systematising inventive effort. With thirteen illustrations. By W. H. Smyth.

Naval Architecture and Sanitation. The elimination of diseases aboard ship. By J. R. Tryon, late Surgeon-General U. S. N.

The Increasing Size of American Locomotives. A look into the future. With nineteen illustrations. By William Forsyth.

Engineering Graduates from Universities. From a works manager's point of view. By George W. Dickie.

The Cost of Machine Work. By Francis H. Richards.

Current Topics.—Boilers with too Much Heating Surface—A Curiosity in Blast Furnace Practice. Illustrated—Brass and Paint on Old Time Locomotives—Fast Transatlantic Service—Electricity as a Bye-Product—Hot Water Heating from a Central Station—Refrigerating by Brine Circulation from a Central Station.

Government Proposals.

U. S. ENGINEER OFFICE, Galveston, Tex., May 30, 1900. Sealed bids in triplicate for improving Galveston Ship Channel and Buffalo Bayou, Tex., by dredging, etc., will be received until 2 p. m., June 30, 1900, and then publicly opened. For information apply to C. S. RICHE, Capt., Engrs. 22–25

U. S. ENGINEER OFFICE, Jones Building, Detroit, Mich., May 29, 1900. Sealed proposals for improving Detroit River, including dredging, removing boulders and excavating bed rock, will be received here until 12 noon (Standard time), June 13, 1900, and then publicly opened. Information furnished on application. G. J. LYDECKER, Lt. Col., Engrs. 22–23

U. S. ENGINEER OFFICE, Vicksburg, Miss., May 28, 1900. Sealed proposals for excavating 7,500,000 cubic yards of earth, more or less, along route for diverting mouth of Yazoo River, near Vicksburg, Miss., will be received here until 3 o'clock, p. m., June 28, 1900, and then publicly opened. Information furnished on application. THOS. L. CASEY, Maj, Engrs. 22–25

U. S. ENGINEER OFFICE, Custom House, Cincinnati, O., May 16, 1900. Sealed proposals for hire of tow boat having cylinders about 14 inches diameter, with 5 feet stroke, to serve as tender for Ohio river dredges during present season, will be received here until 2 p. m., June 18, 1900, and then publicly opened. Information furnished on application. Wm. H. BIXBY, Maj., Engrs. 20-23

SEALED PROPOSALS will be received at the office of the Light-House Board until 2 o'clock p. m., June 25, 1900, and then opened, for furnishing the material and labor of all kinds necessary for the construction and delivery of the twin-screw steel steam light-house tender Sumac, for a fixed sum for said vessel, delivered either in the harbor of Chicago, Ill., or at the Light-House Depot at St. Joseph, Mich., as will be determined by the Light-House Board. Forms of proposals, plans and specifications may be had upon application to the Light-House Board, or at the office of the Light-House Inspector, Chicago, Ill. F. J. HIGGINSON, Rear Admiral, U. S. N. 21–22

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T. H. NEWMAN, Manager Cleveland & Buffalo Transit Co., Cleveland, Ohio.
SPITZER & CO., Bankers, Spitzer Building, Toledo, Ohio.
F. A. FORBES, General Manager Michigan Telephone Co., Detroit, Mich.
JOHN & F. P. GORDON, Traffic and Steamboat Managers, Buffalo, N. Y.
W. L. GUILLEUDEU, Pres Old Dominion Steamship Co., Pier 26, North River, N. Y.
ALEXANDER McVITTIE, Pres. Detroit Ship Building Co., Detroit, Mich.
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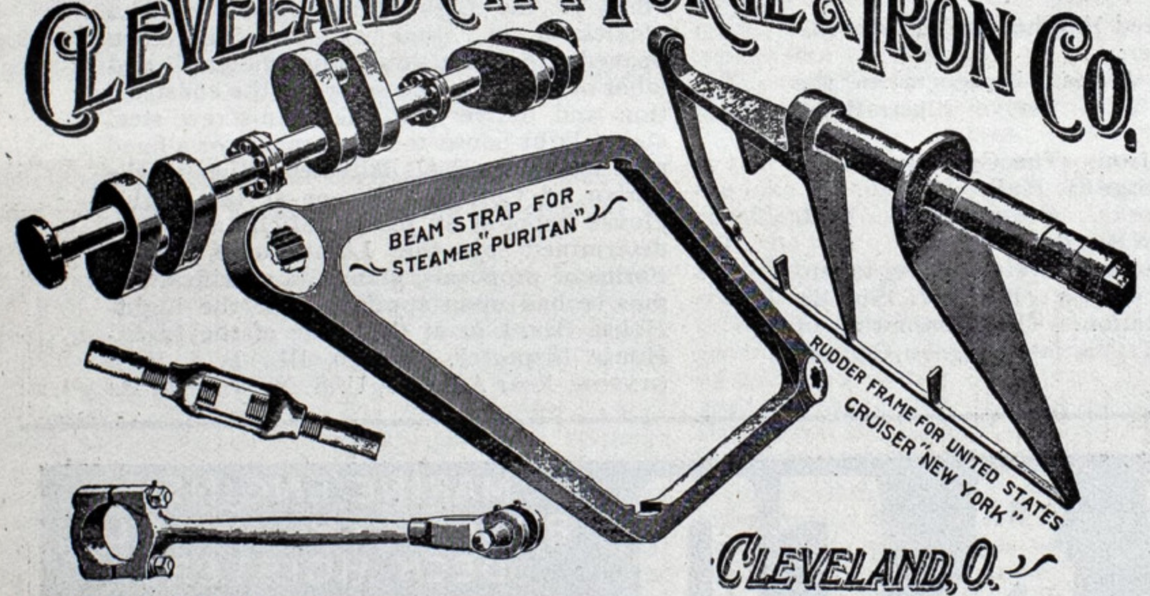

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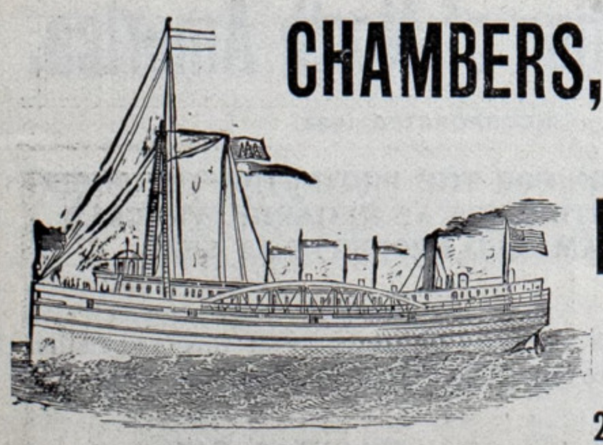

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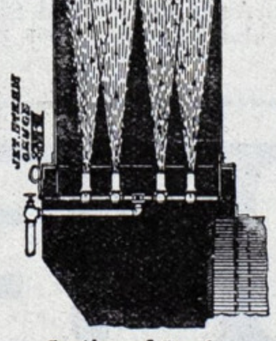

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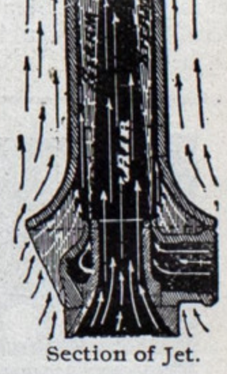

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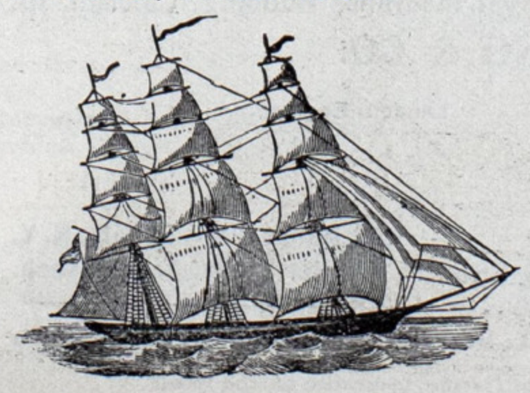

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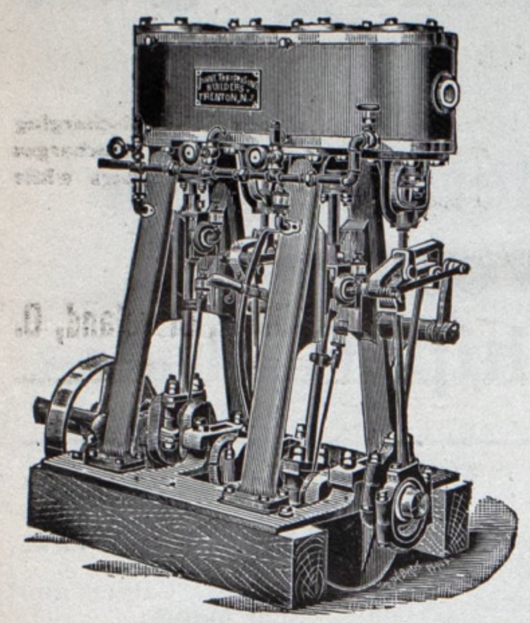

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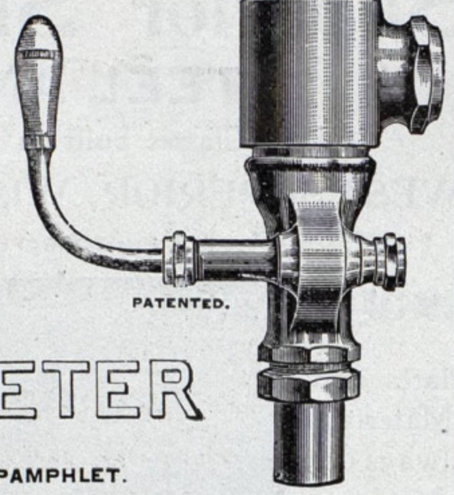

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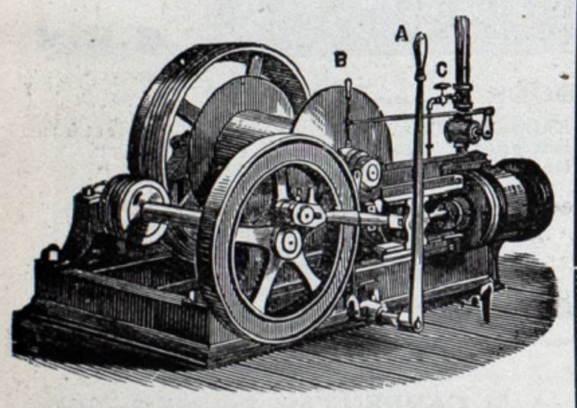

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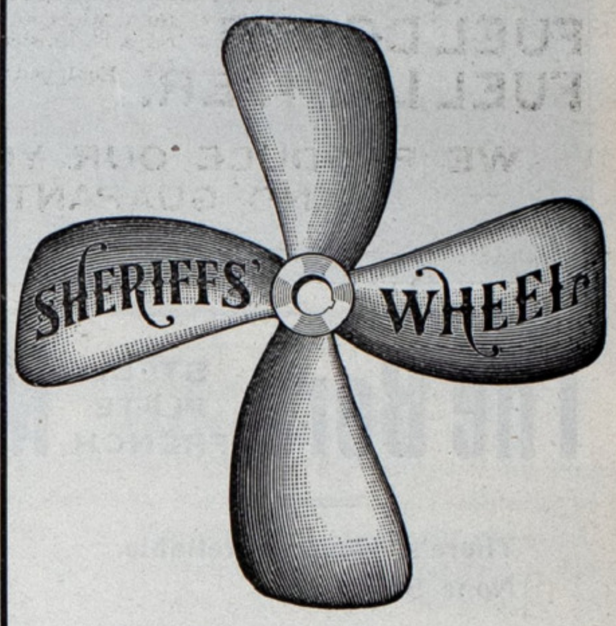

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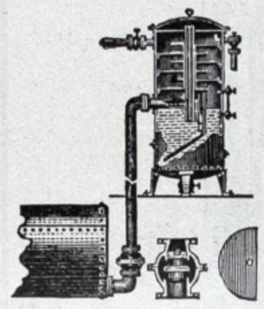

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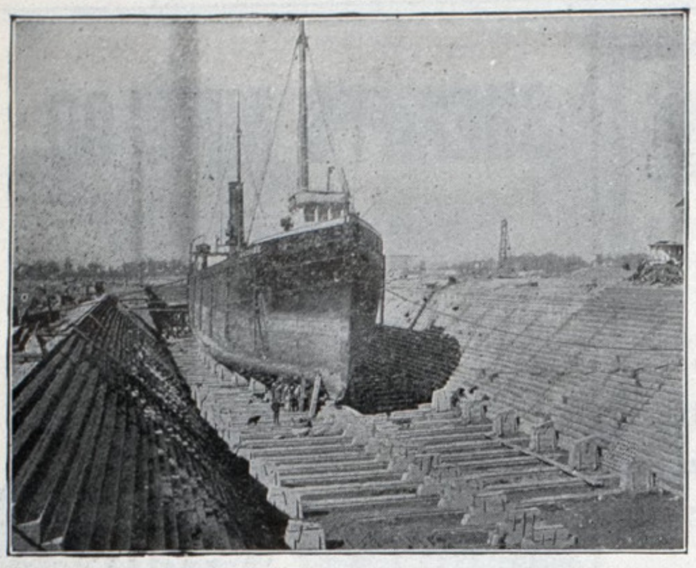

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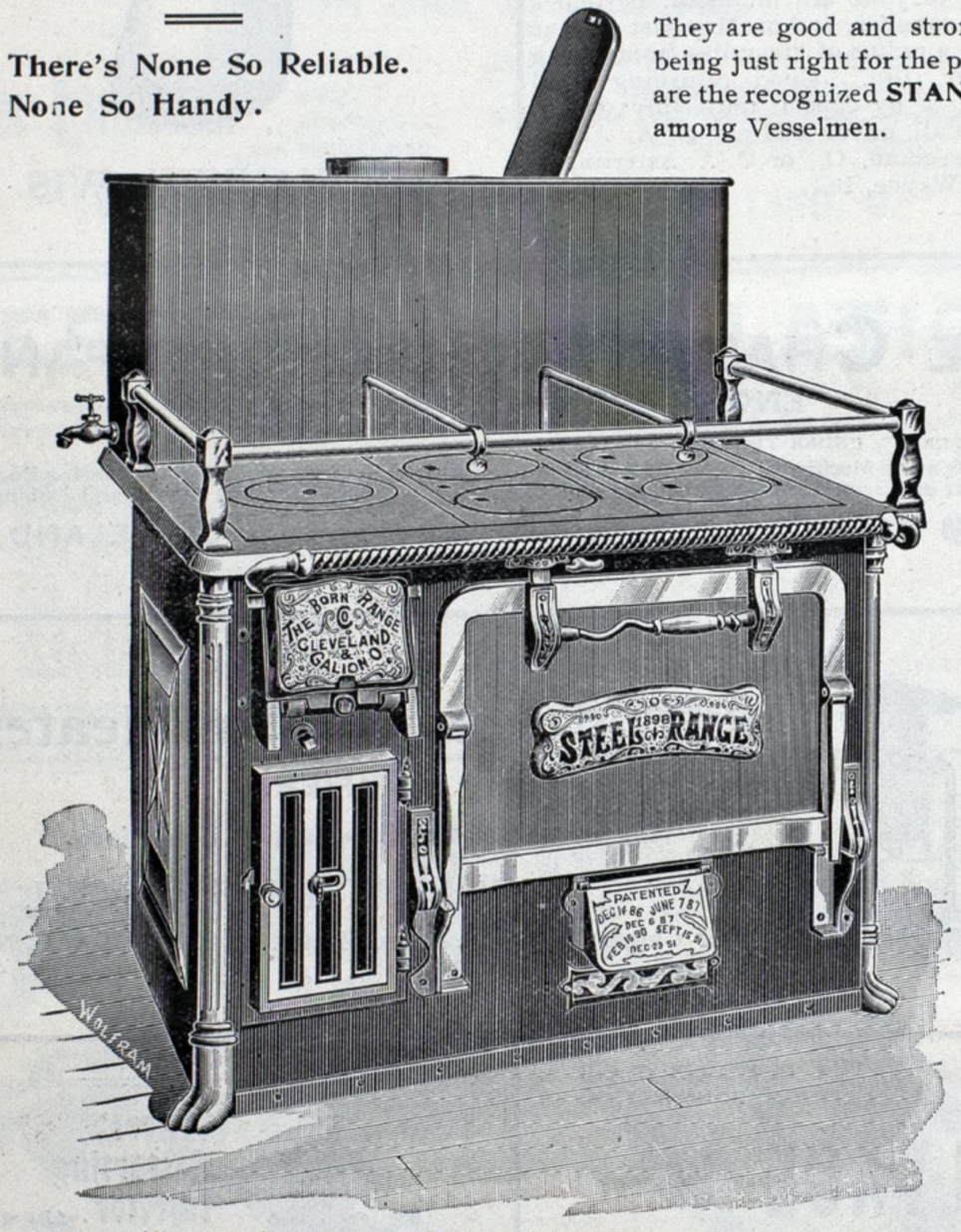

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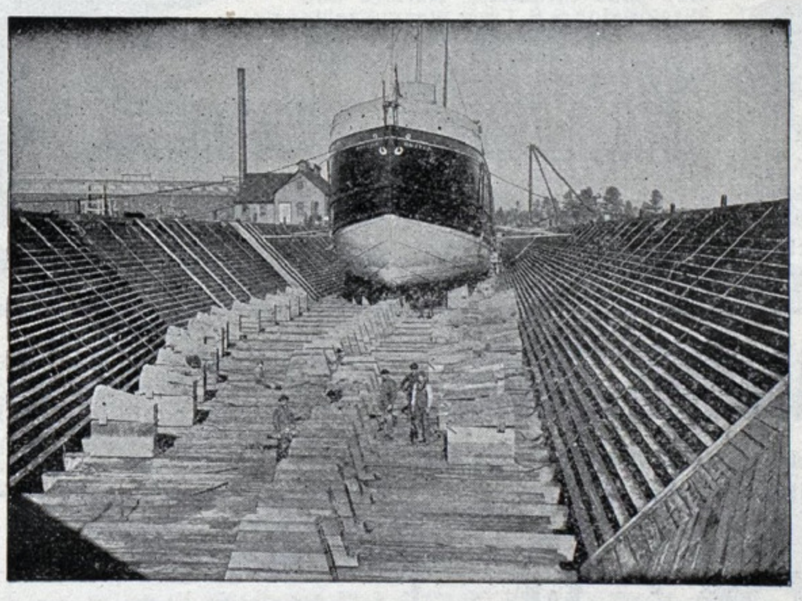

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